# **LMA District Cover Sheet**

**Spring 2019 Levee Inspection Results** 

# **Reclamation District No. 1500 Sutter Basin**

	(March - May)	(June - August)	(September - November)	(December - February)
† Overall LMA Rating (Fall Only)				
	** Non-receipt of Summ Reports may effect or			
† SPRING INSPECTIONS: Overall maintenance deficiencies are rated	e ratings are not detern d using the same crite			ual maintenance
FALL INSPECTIONS: The overall maintena within the attached u			ntion and maintenance de ended to be an indiction o	
Comments				

#### **Unit Cover Sheet**

**Spring 2019 Levee Inspection Results** 

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles
Unit No. 01 Sacramento River	Left	33.15

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/24/2019 - 4/26/2019			
DWR Inspector	Zach Jojola			
Accompanied By				

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# **Levee Inspection Report By Mile - Spring 2019**

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start		Rating **	Α	Issue No. 9				
LM End		Issue Type +	Ма	Location * N/A				
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory		Start		End				
ltom	Item Operations & Maintenance Manuals				0		0	
item					0		0	
DWR ID	DWR_RD1500_01_s _ 2013_9							
		Comn	nent Cod	le				
			_					
		Inspecto	or Comm	nent				
RD 1500 h	as their O	&M Manual.						

No Photos

LM Start		Rating **	Α	Issue No.		55	
LM End		Issue Type +	Ma	Location *		N/A	
Category	Earthen L	GPS Latitude/Longitude					
				Start		End	
Item Emergency Supplie					0		0
пеш	Equipmer	nt			0		0
DWR ID	DWR_RD1	500_01_s _ 201	3_55				
Comment Code							

No Photos

Inspector Comment
RD 1500 maintains a stockpile of flood response material.

LM Start		Rating **	Α	Issue No.		61	
LM End	Issue Type + Ma			Location *		N/A	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory		Start		End			
Flood Preparedness & Training				0		0	
пеш	item				0		0
DWR ID	DWR_RD1	500_01_s _ 201	3_61				
		Comn	nent Cod	le			
	Inspector Comment						
RD 1500 is	s current w	rith it's flood re	esponse	plans and t	raini	ng.	

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# **Levee Inspection Report By Mile - Spring 2019**

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	0.02	Rating **	М	Issue No.		77
LM End	5.36	Issue Type +	Ma	Location *		WS
Catagony	Earthen Levee			GPS La	titud	le/Longitude
Category			Start		End	
Vegetation			38.7610	52 °	38.803431 °	
пеш				-121.6750	18 °	-121.715763 °
DWR ID	DWR_RD1	500_01_s _ 201	9_77			
		Comn	nent Cod	le		
V1 : Control annual grass and weeds on the levee slopes and easements.						

Inspector Comment

LM Start	0.19	Rating **	M	Issue No.		93	
LM End	0.19	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Animal Co	Animal Control			30°	38.761730	0
item				-121.6779	53 °	-121.677953	0
DWR ID	DWR_RD1	500_01_s _ 201	9_93				
		_					

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

There are multiple rodent holes near the landside toe.

No Photos

No Photos

LM Start	0.19	Rating **	M	Issue No.	79			
LM End	1.34	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee		GPS Lat	itude	e/Longitude		
				Start		End		
Item	Vegetatio	n		38.76173	0 °	38.770106	0	
item				-121.67795	3 °	-121.690351	0	
DWR ID	DWR_RD1	500_01_s _ 201	9_79					
Comment Code								

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	0.29	Rating **	М	Issue No.		152
LM End	0.29	Issue Type +	Ma	Location *		LS
Catagony	Earthen Levee			GPS La	atitud	e/Longitude
Calegory	Category					End
Item	Animal Control			38.7629	45 °	38.762945 °
item			-121.6788	12 °	-121.678812 °	
DWR ID	DWR_RD1500_01_f _ 2018_152					

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

There are multiple holes on the the landside slope.





View of rodent holes on landside slope. Spring 2017.

LM Start	0.31	Rating **	М	Issue No.		2550
LM End	0.31	Issue Type +	En	Location *		
Category				GPS La	atitud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.7632	10°	38.763210°
item				-121.6790	17°	-121.679017°
DWR ID	DWR ID 20032					

# Comment Code

#### Inspector Comment

FS\_ID:28183 DS\_ID:20032 EP\_NO: 1566A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - soil erosion around headwall on waterside.- pump

was removed.- overhead powerline.

FIELD\_STRUCT\_DESC: \*REPLACEMENT CROSSING\* 10-inch coated steel irrigation discharge pipe through the levee, 5 feet below the crown. Pump and switch panel on the waterside (WS) berm. Service pole on WS shoulder. Siphon breaker on the landside (LS) slope. 3-foot by 4-foot concrete distribution box at the LS toe. (Replacement of an existing pipeline through the levee authorized under Permit No. 1566-A, 1980 - Ralph White Jr.). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 0.30), 8-inch pipe referenced].

Photo 1 of 3: UCIP\_SP\_2019\_28183\_51845.jpg



WS view: concrete blocks headwall and pump on river bank. Pump has been removed (marked). Surface erosion around headwall.

# **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	0.31	1 Rating ** M		Issue No.	2	2550 (cont)
LM End	0.31	Issue Type +	En	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UC	IP Field Study		38.7632	10°	38.763210°
item			-121.6790	17°	-121.679017 °	
DWR ID 20032						

#### Comment Code

#### Inspector Comment

FS\_ID:28183 DS\_ID:20032 EP NO: 1566A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - soil erosion around headwall on waterside.- pump

was removed.- overhead powerline.

FIELD\_STRUCT\_DESC: \*REPLACEMENT CROSSING\* 10-inch coated steel irrigation discharge pipe through the levee, 5 feet below the crown. Pump and switch panel on the waterside (WS) berm. Service pole on WS shoulder. Siphon breaker on the landside (LS) slope. 3-foot by 4-foot concrete distribution box at the LS toe. (Replacement of an existing pipeline through the levee authorized under Permit No. 1566-A, 1980 - Ralph White Jr.). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 0.30), 8-inch pipe referenced].

FS Date: 1/9/2014

LM Start	0.31	Rating **	М	Issue No.	2550 (cont)
LM End	0.31	Issue Type +	En	Location *	

# Photo 2 of 3: UCIP\_SP\_2019\_28183\_51844.jpg



LS view: pressure breaker (bottom) in steel pipe riser and concrete distribution box on levee toe.

#### Photo 3 of 3: UCIP\_SP\_2019\_28183\_51843.jpg



LS view: open steel pipe in concrete distribution box on levee toe.

# Levee Inspection Report By Mile - Spring 2019

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	<b>0.31</b> Rating ** M Issue No. <b>1</b>			145			
LM End	0.31	Issue Type +	En	Location *		LS	
Category	Earthen Levee			GPS La	atitud	le/Longitude	
Calegory	ategory			Start		End	
Item	Encroach	ments		38.7632	30°	38.763230°	
пеш				-121.6790	14 °	-121.679014 °	
DWR ID DWR_RD1500_01_f _ 2018_145							
Comment Code							

ST : Stairway

Inspector Comment

Stairs are dug into the landside slope.



View of stairs on the landside slope. Spring 2019.

LM Start	0.32	Rating **	М	Issue No.		90
LM End	0.32	Issue Type +	Ma	Location *		LS
Category	Earthen Levee				atitud	e/Longitude
Calegory				Start		End
Item	Animal Control			38.7633	34°	38.763334°
item			-121.6791	19°	-121.679119°	
DWR ID	R ID DWR_RD1500_01_s _ 2019_90					

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

A large rodent hole is near the landside shoulder.

No Photos

LM Start	0.37	Rating **	М	Issue No.		149	
LM End	0.37	Issue Type +	Ma	Location *		LS	
Category	GPS La	atitud	e/Longitude				
Category				Start End		End	
Item	Animal Co	ontrol		38.7638	26°	38.763826	0
пеш			-121.6797	87 °	-121.679787	0	
DWR ID	DWR RD1	500_01_s _ 201	7 149				

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

There are multiple holes on the landside slope.

#### Photo 1 of 1: SP\_2019\_RD1500\_189\_149\_20190304\_00078.jpg



View of rodent holes on landside slope. Spring 2017.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# **Levee Inspection Report By Mile - Spring 2019**

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	0.56	Rating **	A/W	Issue No.		72
LM End	0.82	Issue Type +	Ob	Location *		WS
Category Earthen Levee			GPS La	atitud	le/Longitude	
Category				Start		End
Item	Vegetation			38.7644	62°	38.764638°
пеш				-121.683167 °		-121.687690 °
DWR ID	DWR_RD1	500_01_s _ 201	8_72			
		Comn	nent Cod	de		
V8 : Environmental Requirements.						
Inspector Comment						

LM Start	0.56	Rating **	A/W	Issue No.	72 (cont)
	0.00	Janua Tima i	O.L	Location *	MC



View of the revegetation site on the waterward side toe of the levee looking upstream. Spring 2016.

Photo 2 of 2: SP\_2019\_RD1500\_189\_72\_20190304\_00028.jpg



Sign is located at the toe of the levee on the waterward side. Spring 2016.

Photo 1 of 1: SP\_2019\_RD1500\_189\_100\_20190304\_00049.jpg

LM Start	1.10	Rating **	М	Issue No.		100		
LM End	1.10	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Animal Co	Animal Control				38.767407°		
пеш	item			-121.691589 °		-121.691589°		
DWR ID	DWR ID DWR_RD1500_01_f _ 2018_100							
		Comn	nent Cod	le				
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.								
Inspector Comment								
There are multiple holes on the landside slope and berm.								



View of hole on landside hope. Fall 2017.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	1.25	Rating **	М	Issue No.		99		
LM End	1.25	Issue Type +	Ма	Location *		LS		
Catagonia Earthen Levee			GPS Latitude/Longitude					
Category						End		
Item	, Animal Control			38.76927	74°	38.769274°		
item				-121.69170	00°	-121.691700°		
DWR ID DWR_RD1500_01_f _ 2017_99								
	Comment Code							

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

There are multiple rodent holes and mounds on the landside slope.

LM Start	1.25	Rating **	М	Issue No.	99 (cont)
LM End	1.25	Issue Type +	Ma	Location *	LS



View of rodent holes. Spring 2018

Photo 2 of 2: SP\_2019\_RD1500\_189\_99\_20190304\_00048.jpg



View of holes and mounds on landside slope. Fall 2017.

# **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	1.29	Rating **	М	Issue No.		2551
LM End	1.29	Issue Type +	En	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCIP Field Study			38.76969	97°	38.769697 °
Item			-121.69102	24 °	-121.691024°	
DWR ID	20094					

# Comment Code

#### Inspector Comment

FS ID:28903 DS\_ID:20094 EP NO: 10080

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pump removed from concrete pad and kept inside pump house (may be for storage purpose) on waterside. A 8-inch steel

pipe inside 14-inch pipe.

FIELD\_STRUCT\_DESC: 1 of 2: 14-inch steel irrigation discharge pipe through the levee, 5.2 feet below the crown. Pump in a corrugated metal pump house on the waterside (WS) slope. Butterfly valve on the WS. Concrete staircase on the WS slope. 1.75-inch galvanized iron water line with faucet exposed on the landside (LS) slope, 3.4 feet below the crown. 4-foot by 5.7-foot concrete distribution box at the LS toe. 1.25-inch conduit through levee, 2 feet below the crown. (14-inch steel irrigation discharge pipe through the levee and pump in a corrugated metal pump house on the WS slope authorized under Automatic Board Order (ABO) issued as Permit No. 10080, 1974 -Sebastian Yturralde). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 1.28)]. FS Date: 1/9/2014

LM Start	1.29	Rating **	М	Issue No.	2551 (cont)
LM End	1.29	Issue Type +	En	Location *	





WS view: pipe (left), pump house/store, and concrete steps.

#### Photo 2 of 3: UCIP\_SP\_2019\_28903\_53161.jpg



WS view: U type headwall and 8-inch pipe sleeved into 14-inch steel pipe. Pump was removed from the pipe.

# **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	1.29	Rating **	М	Issue No.	2	2551 (cont)
LM End	1.29	Issue Type +	En	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UC	IP Field Study		38.76969	7 °	38.769697 °
пеш				-121.69102	4 °	-121.691024°
DWR ID	20094					

#### Inspector Comment

Comment Code

FS ID:28903 DS\_ID:20094 EP NO: 10080

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pump removed from concrete pad and kept inside pump house (may be for storage purpose) on waterside. A 8-inch steel

pipe inside 14-inch pipe.

FIELD\_STRUCT\_DESC: 1 of 2: 14-inch steel irrigation discharge pipe through the levee, 5.2 feet below the crown. Pump in a corrugated metal pump house on the waterside (WS) slope. Butterfly valve on the WS. Concrete staircase on the WS slope. 1.75-inch galvanized iron water line with faucet exposed on the landside (LS) slope, 3.4 feet below the crown. 4-foot by 5.7-foot concrete distribution box at the LS toe. 1.25-inch conduit through levee, 2 feet below the crown. (14-inch steel irrigation discharge pipe through the levee and pump in a corrugated metal pump house on the WS slope authorized under Automatic Board Order (ABO) issued as Permit No. 10080, 1974 -Sebastian Yturralde). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 1.28)]. FS Date: 1/9/2014





WS view: pump removed from pipe and stored in pump house.

# Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	1.29	Rating **	М	Issue No.		2552	
LM End	1.29	Issue Type +	En	Location *			
Category Supplemental			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	DWR UC	IP Field Study		38.76969	8°	38.769698	0
пеш				-121.69102	3°	-121.691023	0
DWR ID	20095						

#### Comment Code

#### Inspector Comment

FS\_ID:28905 DS\_ID:20095 EP\_NO: 10080

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: - an electrical conduit for the pump- 1-3/4-inch galvanized iron waterline with tap exposed on landward slope 3.4 feet below grown not found lockuded in Record No. 2004

below crown not found.Included in Record No. 20094. FIELD\_STRUCT\_DESC: 2 of 2: 14-inch steel irrigation discharge pipe

metal pump house on the waterside (WS) slope. Butterfly valve on the WS. Concrete staircase on the WS slope. 1.75-inch galvanized iron water line with faucet exposed on the landside (LS) slope, 3.4 feet below the crown. 4-foot by 5.7-foot concrete distribution box at the LS toe. 1.25-inch conduit through levee, 2 feet below the crown. (1.75-inch galvanized iron water line authorized under Automatic Board Order (ABO) issued as Permit No. 10080, 1974 - Sebastian Yturralde). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 1.28)].

FS Date: 1/9/2014

LM Start	1.33	Rating **	M	Issue No.		4		
LM End	1.33	Issue Type +	En	Location *		LS		
Category Earthen Levee				GPS La	atitud	e/Longitude		
Category	Category					End		
Item	Encroachments			38.770023 °		38.770023 °		
item				-121.690575 °		-121.690575 °		
DWR ID	DWR_RD1	500_01_s _ 201	2_4					
		Comn	nent Cod	le				
RW : Reta	ining Wall							
Inspector Comment								
A retaining	wall was	built into the le	evee.					

Photo 1 of 1 : SP_2019_RI	D1500_189_4_20190304_00001.jpg
A. A	THE CALL WATER



View of the retaining wall that is in USACE as-builts on the landward side of the levee looking upstream. Wall cuts into levee toe. Spring 2016.

# Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	1.34	Rating **	A/W	Issue No.		85	
LM End	1.95	Issue Type +	Ma	Location *	WS		
Category			GPS Latitude/Longitude				
Calegory						End	
Item		CE Erosion S	Survey,	38.7703	90°	38.777282 °	
пеш	DRAFT		-121.6905	53 °	-121.685841 °		
DWR ID DWR_RD1500_01_f _ 2018_85							
	Comment Code						

#### Inspector Comment

2017 Site ID: SAC 86.3 L

Status: Eroding

2017 Field Notes: No observed change..

Site History: 2006 - New erosion upstream, new bank failures near levee but still fairly wide berm in most places. 2008 - Large berm, questionable as to if it should remain in the inventory. 2010 - Minor new erosion, old cobble starting to fail. 2011 - Cobble continues to unravel and additional slumping. 2012 - Minor new erosion at bank mid point. 2013 - Minor new erosion. 2016 - Toe relatively stable. Upper slope is over steepened.



USACE 2013 Photo #1

LM Start	1.35	Rating **	М	Issue No.		98	
LM End	1.35	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Item	Vegetation			38.7701	42 °	38.770142 °	
пеш				-121.6901	78 °	-121.690178 °	
DWR ID DWR_RD1500_01_f _ 2017_98							
Comment Code							

V6: Landscaping

#### Inspector Comment

An oleander bush is partially blocking the landside slope.

# Photo 1 of 1: SP\_2019\_RD1500\_189\_98\_20190304\_00046.jpg



View of vegetation on landside slope. Fall 2017.

# Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	1.63	Rating **	М	Issue No.		2553
LM End	1.63	Issue Type +	En	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UC	IP Field Study		38.77286	62 °	38.772862 °
Item				-121.6864	53 °	-121.686453 °
DWR ID	20033					

#### Comment Code

#### Inspector Comment

FS\_ID:28204 DS\_ID:20033 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pump removed- erosion around pump station.-

overhead electrical line.

FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe through the levee, 10 feet below the crown. Pump and gate valve on the riverbank. Service pole and switch panel on the waterside (WS) shoulder. Pipe crosses irrigation ditch and discharges into a steel distribution box in the field. (10-inch steel irrigation discharge pipe through the levee and pump on the riverbank authorized under Automatic Board Order (ABO) issued as Permit No. 10043, 1974 - Leo Giovanetti). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 1.63)].

FS Date: 1/9/2014

LM Start	1.63	Rating **	М	Issue No.	2553 (cont)
LM End	1.63	Issue Type +	En	Location *	



WS view: Service pole with control panel on levee shoulder.

#### Photo 2 of 3: UCIP\_SP\_2019\_28204\_51874.jpg



WS view: pump (removed) and inlet pipe on river bank.

# **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	1.63	Rating **	М	Issue No.	2	2553 (cont)	
LM End	1.63	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.77286	2 °	38.772862 °	
пеш				-121.68645	3°	-121.686453 °	
DWR ID	20033						

## Comment Code

#### Inspector Comment

FS\_ID:28204 DS\_ID:20033 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pump removed- erosion around pump station.-

overhead electrical line.

FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe through the levee, 10 feet below the crown. Pump and gate valve on the riverbank. Service pole and switch panel on the waterside (WS) shoulder. Pipe crosses irrigation ditch and discharges into a steel distribution box in the field. (10-inch steel irrigation discharge pipe through the levee and pump on the riverbank authorized under Automatic Board Order (ABO) issued as Permit No. 10043, 1974 - Leo Giovanetti). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 1.63)].

FS Date: 1/9/2014



LS view: pipe crosses irrigation ditch. Steel distribution box across irrigation ditch.

LM Start	1.68	Rating **	A/W	Issue No.		143
LM End	1.68	Issue Type +	Ma	Location *		LS
Category	evee	GPS Latitude/Longitude				
Category				Start		End
Item	Animal Co	ontrol		38.7735	11 °	38.773511 °
пеш				-121.6859	03 °	-121.685903 °
DWR ID	DWR ID DWR_RD1500_01_s _ 2019_143					

Comment Code A1: Exterminate rodents and backfill and compact or grout burrows.

#### Inspector Comment

There is an active rodent site on the landside slope. Recommend monitoring.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	1.94	Rating **	М	Issue No.		78	
LM End	3.70	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Vegetatio	38.7771	62 °	38.797180			
пеш				-121.685308 °		-121.691410	
DWR ID	DWR_RD1	500_01_s _ 201	9_78				
		Comn	nent Cod	le			
	V1 : Control annual grass and weeds on the levee slopes and easements.						
	Inspector Comment						

No Photos

LM Start	1.96	Rating **	М	Issue No.		2554	
LM End	1.96	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Lati	ud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.777433	°	38.777433	0
item				-121.685348	٥	-121.685348	0
DWR ID	20034						

#### Comment Code

#### Inspector Comment

FS\_ID:28263 DS\_ID:20034 EP\_NO: 16146

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pump removed- overhead powerline- pile structure abandoned- levee slope erosion due to leaky siphon breaker on landside.

FIELD\_STRUCT\_DESC: \*REPLACEMENT CROSSING\* 12-inch steel irrigation discharge pipe through the levee, 12 feet below the crown. Pump mounted on the riverbank. Butterfly valve on the waterside (WS). Power pole with one anchor on the WS slope. Pipe discharges into a 5-foot by 5-foot damaged concrete distribution box across the irrigation ditch on the landside (LS). Electrical conduit through the levee. (Cat. I-Furlan). (Abandonment-in-place of an existing pipe and replacement of approximately 70 feet of 12-inch irrigation discharge pipe authorized under Permit No. 16146, 1993 - Antonio Furlan and Joe Schreiner). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 1.96)].

FS Date: 1/9/2014

#### Photo 1 of 3: UCIP\_SP\_2019\_28263\_51965.jpg



WS view: Pump (removed and plywood plated), pipe, and gate valve in CMP riser on river bank.

# Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	1.96	Rating **	М	Issue No.	2	2554 (cont)
LM End	1.96	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UC	IP Field Study		38.77743	3°	38.777433 °
пеш				-121.68534	8 °	-121.685348°
DWR ID	20034					

# Comment Code

#### Inspector Comment

FS\_ID:28263 DS\_ID:20034 EP\_NO: 16146

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pump removed- overhead powerline- pile structure abandoned- levee slope erosion due to leaky siphon breaker

on landside.

FIELD\_STRUCT\_DESC: \*REPLACEMENT CROSSING\* 12-inch steel irrigation discharge pipe through the levee, 12 feet below the crown. Pump mounted on the riverbank. Butterfly valve on the waterside (WS). Power pole with one anchor on the WS slope. Pipe discharges into a 5-foot by 5-foot damaged concrete distribution box across the irrigation ditch on the landside (LS). Electrical conduit through the levee. (Cat. I Furlan). (Abandonment-in-place of an existing pipe and replacement of approximately 70 feet of 12-inch irrigation discharge pipe authorized under Permit No. 16146, 1993 - Antonio Furlan and Joe Schreiner). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 1.96)].

FS Date: 1/9/2014

LM Start	1.96	Rating **	М	Issue No.	2554 (cont)
LM End	1.96	Issue Type +	En	Location *	

# Photo 2 of 3 : UCIP\_SP\_2019\_28263\_51964.jpg

LS view: siphon breaker in CMP riser. Levee slope erosion due to leaky siphon breaker.

#### Photo 3 of 3: UCIP\_SP\_2019\_28263\_51963.jpg



LS view: discharge pipe crossing irrigation ditch.

# **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	2.30	Rating **	A/W	Issue No.		87
LM End	2.52	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item		ACE Erosion S	Survey,	38.78196	32 °	38.784936 °
item	DRAFT		-121.68803	33 °	-121.690033 °	
DWR ID	DWR_RD1500_01_f _ 2018_87					

# Inspector Comment

Comment Code

2017 Site ID: SAC 87.1 L

Status: Eroding

2017 Field Notes: Large whole bank failure section in middle of site. Site History: 2010 - The upstream end of the repair site at 87.0. Repair did not extend far enough upstream. 2011 - New erosion pockets. 2012 - Minor new erosion at toe. 2013 - Minor new erosion. 2015 -Significant new toe erosion. 2016 - Fresh erosion on riverbank.

# Photo 1 of 1: SP\_2019\_RD1500\_189\_87\_20190304\_00040.jpg



USACE 2013 Photo #1

LM Start	2.38	Rating **	М	Issue No.	2555		
LM End	2.38	Issue Type +	En	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.7831	84°	38.783184°	
пеш		36°	-121.688136 °				
DWR ID 20035							
Comment Code							

# Inspector Comment

FS\_ID:28264 DS\_ID:20035 EP\_NO: 10029

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pump removed- outlet plugged- looks

abandoned. Found abandoned pipe parts on levee slope and berm.-

overhead powerline

FIELD\_STRUCT\_DESC: \*ABANDONED\* 12-inch steel irrigation discharge pipe through the levee, 11 feet below the crown. Two metal cutoff walls installed. Pumps on the riverbank during irrigation season. Gate valve at the waterside (WS) toe. Pipe discharges into a 2.5-foot by 2.5-foot concrete distribution box on the landside (LS) of the irrigation ditch. (Retention of a 12-inch steel irrigation discharge pipe through the levee and pumps on the riverbank during irrigation season authorized under Automatic Board Order (ABO) issued as Permit No. 10029, 1974 - Merle Anderson). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 2.40)]. FS Date: 1/9/2014

# Photo 1 of 3: UCIP\_SP\_2019\_28264\_51971.jpg



WS view: steel pipe, gate valve, and pump (removed) on river bank. Looks abandoned.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

# **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	2.38	Rating **	М	Issue No.	2	2555 (cont)
LM End	2.38	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	IP Field Study		38.78318	4 °	38.783184°
пеш			-121.68813	6 °	-121.688136 °	
DWR ID	20035					·

#### Comment Code

#### Inspector Comment

FS\_ID:28264 DS\_ID:20035 EP NO: 10029

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pump removed- outlet plugged- looks

abandoned. Found abandoned pipe parts on levee slope and berm.-

overhead powerline

FIELD\_STRUCT\_DESC: \*ABANDONED\* 12-inch steel irrigation discharge pipe through the levee, 11 feet below the crown. Two metal cutoff walls installed. Pumps on the riverbank during irrigation season. Gate valve at the waterside (WS) toe. Pipe discharges into a 2.5-foot by 2.5-foot concrete distribution box on the landside (LS) of the irrigation ditch. (Retention of a 12-inch steel irrigation discharge pipe through the levee and pumps on the riverbank during irrigation season authorized under Automatic Board Order (ABO) issued as Permit No. 10029, 1974 - Merle Anderson). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 2.40)]. FS Date: 1/9/2014

LM Start	2.38	Rating **	М	Issue No.	2555 (cont)
LM End	2 38	Issue Type +	Fn	Location *	

# Photo 2 of 3: UCIP\_SP\_2019\_28264\_51970.jpg



LS view: discharge pipe crossing irrigation ditch on landside.

#### Photo 3 of 3: UCIP\_SP\_2019\_28264



LS view: plugged discharge pipe with air vent across irrigation ditch on landside.

# **Levee Inspection Report By Mile - Spring 2019**

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	2.54	Rating **	М	Issue No.		963			
LM End	3.68	Issue Type +	En	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude			
Calegory			Start		End				
Item	Encroachments			38.7853	51°	38.797128 °			
item				-121.689075 °		-121.691047 °			
DWR ID	DWR ID DWR_RD1500_01_s _ 2012_963								
		Comn	nent Cod	le					
DT : Ditch									
	Inspector Comment								



View of the ditch at the toe of the landward side of the levee looking upstream. Spring 2016.

LM Start	3.69	Rating **	М	Issue No.		131	
LM End	3.69	Issue Type +	En	Location *	WS		
Category	Earthen L	GPS La	atitud	e/Longitude			
Calegory			Start		End		
Item	Encroachments			38.7971	52°	38.797152°	
item			-121.691238 °		-121.691238°		
DWR ID	DWR ID DWR_RD1500_01_f _ 2016_131						
Comment Code							

BU: Building

Inspector Comment

There is an abandoned building at this location.



Abandoned building at waterward toe of the levee. Fall 2016.

LM Start	3.94	Rating **	С	Issue No.		128	
LM End	3.94	Issue Type +	En	Location *	WS		
Category	Earthen L	GPS La	titud	e/Longitude			
Category				Start		End	
Item	Encroachments			38.7975	41 °	38.797541	0
пеш				-121.6956	74 °	-121.695674	0
DWR ID	DWR_RD1500_01_s _ 2018_128						
Comment Code							

UR : Urban

Inspector Comment

Mobile trailer on the waterside berm taking up long-term residence.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	3.94	Rating **	U	Issue No.		7	
LM End	3.94	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS L	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		38.7975	73°	38.797573 °	
пеш	item				'27 °	-121.695727 °	
DWR ID	DWR_RD1	500_01_s _ 201	2_7				
		Comn	nent Cod	le			
BU : Buildi	ng						
		Inspecto	or Comm	nent			

LM Start	3.94	Rating **	U	Issue No.	7 (cont)
LM End	3.94	Issue Type +	Fn	Location *	LS

Photo 1 of 2: SP\_2019\_RD1500\_189\_7\_20190304\_00002.jpg



A small building is encroaching into the landside levee toe.

Photo 2 of 2: SP\_2019\_RD1500\_189\_7\_20190304\_00003.jpg



Chicken coupes have been added along the toe of the levee. Spring

LM Start	3.95	Rating **	С	Issue No.		141	
LM End	3.95	Issue Type +	En	Location *		WS	
Category	Earthen Levee					le/Longitude	
Calegory				Start		End	
Item	Encroach	ments		38.7976	42 °	38.797642	0
item				-121.6958	14 °	-121.695814	0
DWR ID	DWR_RD1	500_01_f _ 201	8_141				
		Comn	nent Cod	le			
FW : Firev	vood						
		Inspecto	or Comm	ent			
There is a	firewood p	ile on the wat	erside sł	noulder.			

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	3.97	Rating **	С	Issue No.	8		
LM End	3.97	Issue Type +	En	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Vegetatio	n		38.79783	38°	38.797838 °	
пеш				-121.69604	16°	-121.696046°	
DWR ID	DWR_RD1	500_01_s _ 201	2_8				
Comment Code							
V6 : Landscaping							

V6 : Landscaping

#### Inspector Comment

Most of the vegetation has been removed. There appears to be new landscaping at the toe of the levee.

No Photos



WS view: slant pump on steel frame on levee berm.

LM Start	4.01	Rating **	M	Issue No.		2556	
LM End	4.01	Issue Type +	En	Location *			
Category	Suppleme	mental		GPS Latitude/Longitude		e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.79843	6°	38.798436	0
Item				-121.69628	0 °	-121.696280	0
DWR ID	20037						

#### Comment Code

#### Inspector Comment

FS\_ID:28272 DS ID:20037 EP\_NO: 3638

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - No protection for pressure breaker.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, 2.4 feet below the crown. Slant pump on the berm. Siphon breaker on the landside (LS) slope. Service pole at the LS toe. Pipe discharges into a 36-inch concrete standpipe on the LS. (Installation, maintenance, and operation of an inclined pump and an existing pipe to remain through the levee authorized under Permit No. 3638, 1961 James F. Waters). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 4.04)].

FS Date: 1/9/2014

Sunday, June 02, 2019 09:08

N: Not Inspected/Rated C: Corrected

Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

**FINAL DATA** Page 20 of 132

# **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	4.01	Rating **	М	Issue No.	2	2556 (cont)	
LM End	4.01	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.79843	6°	38.798436 °	
пеш				-121.69628	0 °	-121.696280 °	
DWR ID	20037					·	

#### Comment Code

#### Inspector Comment

FS\_ID:28272 DS\_ID:20037 EP\_NO: 3638

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - No protection for pressure breaker.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, 2.4 feet below the crown. Slant pump on the berm. Siphon breaker on the landside (LS) slope. Service pole at the LS toe. Pipe discharges into a 36-inch concrete standpipe on the LS. (Installation, maintenance, and operation of an inclined pump and an existing pipe to remain through the levee authorized under Permit No. 3638, 1961 -James F. Waters). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 4.04)].

FS Date: 1/9/2014

LM Start	4.01	Rating **	М	Issue No.	2556 (cont)
LM End	4.01	Issue Type +	En	Location *	

# Photo 2 of 3: UCIP\_SP\_2019\_28272\_52011.jpg



LS view: pressure breaker without protection on levee slope.

#### Photo 3 of 3: UCIP\_SP\_2019\_28272\_52013.jpg



LS view: power pole and concrete standpipe on levee toe.

# Levee Inspection Report By Mile - Spring 2019

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	4.02	Rating **	М	Issue No.		54		
LM End	4.12	Issue Type +	En	Location *		LS		
Category	evee	GPS La	atitud	e/Longitude				
Calegory				Start		End		
Item	Encroach	ments		38.7985	26°	38.800063 °		
item				-121.6963	26°	-121.696622°		
DWR ID DWR_RD1500_01_s _ 2012_54								
		Comn	nent Cod	le				
DT : Ditch								
		Inspecto	or Comm	nent				
A ditch rur	s along th	e toe of the le	vee.					



View of the ditch on the landward side of the levee looking upstream. Spring 2016.

LM Start	4.16	Rating **	М	Issue No.		11	
LM End	4.16	Issue Type +	En	Location *		LS	
Catagory	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroach		38.8005	48°	38.800548°		
пеш				-121.696751 ° -121.6967			
DWR ID	DWR_RD1	500_01_s _ 201	2_11			·	
		Comn	nent Cod	de			
BU : Buildi	ng						
		Inspecto	or Comm	nent			



View of the equipment shed on the landward side of the levee looking downstream. Spring 2016.

# Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	4.61	Rating **	М	Issue No.		142			
LM End	4.61	Issue Type +	En	Location *	LS				
Earthen Levee			GPS L	atitud	e/Longitude				
Category				Start		End			
Item	Encroachments			38.8035	09°	38.803509°			
item				-121.703046 °		-121.703046 °			
DWR ID	DWR_RD1	500_01_f _ 201	8_142						
		Comn	nent Cod	le					
PR : Prunii	ngs								
Inspector Comment									



View of the pruning pile on the landward side of the levee looking upstream. Spring 2016.

LM Start	4.68	Rating **	М	Issue No.	2557			
LM End	4.68	Issue Type +	En	Location *				
Supplemental				GPS Latitude/Longitude				
Category			Start		End			
Item	DWR UC	P Field Study		38.8030	25°	38.803025 °		
item				-121.7040	91 °	-121.704091 °		
DWR ID	20040							
Comment Code								

# Inspector Comment

FS\_ID:28912 DS\_ID:20040 EP\_NO: 5031

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: New butterfly valve in CMP riser on waterside slope. New pipe and pump. Needs cleaning and clearing of siphon breaker in CMP on landside. An abandoned 5x5 foot concrete distribution box on landside. Abandoned pipe found on both sides of the levee FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee at a slight angle, 4.2 feet below the crown. 2-inch conduit through the levee, 2 feet below the crown. Slant pump on a steel platform on the berm. (Slant pump authorized under Permit No. 5031, 1965 - Gladys Johnston and Helen Dixon). Pipe discharges into an irrigation ditch and an abandoned 5-foot by 5-foot concrete distribution box on the landside. (Pipe originally installed in 1950. 12-inch centrifugal irrigation pump and 14-inch, 12-gage welded steel pipe through the levee authorized under Permit No. 1466, 1950 - Estate of Caroline L. Knox. Pipe reinstalled by USACE in 1958). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 4.71)]. FS Date: 1/9/2014

#### Photo 1 of 3: UCIP SP 2019 28912 53181.jpg



WS view: slant pump and switch panel in shed on levee berm.

# Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	4.68	Rating **	М	Issue No.	2	2557 (cont)
LM End	4.68	Issue Type +	En	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory	Category		Start		End	
Item	DWR UC	IP Field Study		38.80302	25 °	38.803025 °
пеш					91 °	-121.704091 °
DWR ID	20040					

# Comment Code

#### Inspector Comment

FS\_ID:28912 DS\_ID:20040 EP\_NO: 5031

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: New butterfly valve in CMP riser on waterside slope. New pipe and pump. Needs cleaning and clearing of siphon breaker in CMP on landside. An abandoned 5x5 foot concrete distribution box on landside. Abandoned pipe found on both sides of the levee. FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee at a slight angle, 4.2 feet below the crown. 2-inch conduit through the levee, 2 feet below the crown. Slant pump on a steel platform on the berm. (Slant pump authorized under Permit No. 5031, 1965 - Gladys Johnston and Helen Dixon). Pipe discharges into an irrigation ditch and an abandoned 5-foot by 5-foot concrete distribution box on the landside. (Pipe originally installed in 1950. 12-inch centrifugal irrigation pump and 14-inch, 12-gage welded steel pipe through the levee authorized under Permit No. 1466, 1950 - Estate of Caroline L. Knox. Pipe reinstalled by USACE in 1958). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 4.71)]. FS Date: 1/9/2014

LM Start	4.68	Rating **	М	Issue No.	2557 (cont)
LM End	4.68	Issue Type +	En	Location *	



LS view: obstructed siphon breaker in CMP riser.



WS view: new butterfly valve in CMP on levee shoulder.

Location Rating Issue Type LS : Land Side Ma : Maintenance Deficiency N/A: Not Applicable N: Not Inspected/Rated A: Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

# **Levee Inspection Report By Mile - Spring 2019**

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	4.99	Rating **	М	Issue No.		139	
LM End	4.99	Issue Type +	En	Location *		LS	
Category	evee	GPS La	atitud	le/Longitude			
Category				Start		End	
Item	Encroachi	ments		38.8016	06°	38.801606 °	
item				-121.7094	99°	-121.709499 °	
DWR ID	DWR_RD1	500_01_f _ 201	8_139				
		Comn	nent Coo	le			
EQ : Equip	ment						
		Inspecto	or Comm	nent			
There are beehives at the landside toe.							

LM Start	5.14	Rating **	М	Issue No.		108
LM End	5.14	Issue Type +	En	Location *		LS
Category	Catagoria Earthen Levee			GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroach	ments		38.8019	62 °	38.801962 °
пеш				-121.7121	18 °	-121.712118°
DWR ID	DWR_RD1	500_01_f _ 201	5_108			
		Comn	nent Cod	le		
EQ : Equip	ment					
		Inspecto	or Comm	nent		



View of the equipment on the landward side of the levee looking upstream. Fall 2015.

# **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	5.19	Rating **	М	Issue No.		2558
LM End	5.19	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		38.80232	2°	38.802322
пеш				-121.71290	3°	-121.712908
DWR ID	20041					

#### Comment Code

#### Inspector Comment

FS\_ID:28913 DS\_ID:20041 EP\_NO: 10056

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Depression on landside levee slope around siphon breaker due to leakage. Siphon breaker needs protection.

FIELD\_STRUCT\_DESC: 18-inch steel irrigation discharge pipe through the levee, 4 feet below the crown. 1.5-inch conduit through the levee, 20 feet below the crown. Slant pump in a corrugated metal pump house on the waterside (WS). Wooden steps on the WS slope. Siphon breaker on the landside (LS) slope. 5-foot by 5-foot concrete distribution box at the LS toe. (18-inch steel irrigation discharge pipe and all other elements of this irrigation structure retained under Automatic Board Order (ABO) issued as Permit No. 10056, 1974 - Philip Leiser). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento

O&M Manual 128, March 1960, (HLM 5.23)].

FS Date: 1/9/2014

LM Start	5.19	Rating **	М	Issue No.	2558 (cont)
LM End	5.19	Issue Type +	En	Location *	

# Photo 1 of 3: UCIP\_SP\_2019\_28913\_53184.jpg



WS view: wooden steps to pump house on levee berm.

#### Photo 2 of 3: UCIP\_SP\_2019\_28913\_53183.jpg



LS view: depression on landside levee slope around siphon breaker due to leakage. Concrete distribution box (top) on levee toe.

# **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	5.19	Rating **	М	Issue No.	2	2558 (cont)
LM End	5.19	Issue Type +	En	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.80232	2°	38.802322°
пеш				-121.71290	8 °	-121.712908 °
DWR ID	20041					

#### Comment Code

#### Inspector Comment

FS\_ID:28913 DS\_ID:20041 EP\_NO: 10056

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Depression on landside levee slope around siphon breaker due to leakage. Siphon breaker needs protection.

FIELD\_STRUCT\_DESC: 18-inch steel irrigation discharge pipe through the levee, 4 feet below the crown. 1.5-inch conduit through the levee, 20 feet below the crown. Slant pump in a corrugated metal pump house on the waterside (WS). Wooden steps on the WS slope. Siphon breaker on the landside (LS) slope. 5-foot by 5-foot concrete distribution box at the LS toe. (18-inch steel irrigation discharge pipe and all other elements of this irrigation structure retained under Automatic Board Order (ABO) issued as Permit No. 10056, 1974 - Philip Leiser). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento

O&M Manual 128, March 1960, (HLM 5.23)].

FS Date: 1/9/2014



LS view: leaky and obstructed siphon breaker. Depression around siphon breaker due to leakage.

LM Start	5.32	Rating **	U	Issue No.		125		
LM End	5.35	Issue Type +	En	Location *	LS			
Category	evee	GPS Latitude/Longitude						
Calegory		Start				End		
Item	Encroachments			38.8031	81 °	38.803344°		
item				-121.7151	41 °	-121.715616 °		
DWR ID	DWR_RD1	500_01_f _ 201	6_125					
Comment Code								
FE : Fence	FE : Fence							

Inspector Comment

Photo 1 of 1 : SP\_2019\_RD1500\_189\_125\_20190304\_00069.jpg



View of fence and vegetation on LS slope. Fall 2016.

# Levee Inspection Report By Mile - Spring 2019

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	5.61	Rating **	М	Issue No.		52	
LM End	5.69	Issue Type +	En	Location *	WS		
Category	Category Earthen Levee			GPS Latitude/Longitude			
Calegory						End	
Item	Encroach	ments		38.80306	67°	38.803238°	
Item					70 °	-121.721847°	
DWR ID	DWR_RD1	500_01_s _ 201	2_52			·	

#### Comment Code

EQ: Equipment

#### Inspector Comment

Sting Rayz Beach Boardwalk Marina on the waterside berm should move equipment stored on levee toe away from levee.

# Photo 1 of 1 : SP\_2019\_RD1500\_189\_52\_20190304\_00024.jpg



View of equipment on waterside levee toe looking upstream. Spring 2016.

LM Start	6.24	Rating **	A/W	Issue No.	136		
LM End	6.24	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory			Start		End		
Item	Erosion /	Erosion / Bank Caving			93 °	38.811093°	
пеш				-121.7227	90°	-121.722790°	
DWR ID DWR_RD1500_01_f _ 2018_136							
Comment Code							
E4 - Note and acceptes associate site							

E1: Note and monitor erosion site.

#### Inspector Comment

There is minor runoff on the waterside slope. Recommend monitoring.

# Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	6.48	Rating **	М	Issue No.		2559
LM End	6.48	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory						End
Item	DWR UC	IP Field Study		38.81450	1 °	38.814501 °
пеш					0 °	-121.723040 °
DWR ID	20044					

#### Comment Code

#### Inspector Comment

FS\_ID:28286 DS\_ID:20044 EP\_NO: 10074

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Not found- 36-inch concrete standpipe on landside.

2-inch conduit through the levee.Pipe description does not match with field observaion. It needs review and more info from LMA.A capped pipe, air vent, and butterfly valve found on landside toe. But, it is not clear whether these belongs to this crossing.

FIELD\_STRUCT\_DESC: 30-inch steel irrigation discharge pipe and electrical conduit through the levee, 13 feet below the crown. Slide gate in a 42-inch corrugated metal pipe (CMP) riser on the berm. Slant pump on steel pump platform on the berm. Installed by USACE in 1959. (30-inch steel irrigation discharge pipe and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10074, 1974 - T. I. and T. Company). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 6.53)].

FS Date: 1/9/2014

LM Start	6.48	Rating **	М	Issue No.	2559 (cont)
LM End	6.48	Issue Type +	En	Location *	

# Photo 1 of 2: UCIP\_SP\_2019\_28286\_52059.jpg



WS view: CMP riser with slide gate and slant pump on steel platform on levee berm.

#### Photo 2 of 2: UCIP\_SP\_2019\_28286\_52058.jpg



LS view: a capped pipe on levee toe. It is not clear whether this pipe is connected to the CMP riser on waterside.

# Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	6.93	Rating **	М	Issue No.		167		
LM End	8.88	Issue Type +	Ma	Location *		WS		
Category	Earthen Levee				atitud	le/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		38.8209	55°	38.844519		
пеш				-121.7231	51 °	-121.728075		
DWR ID	DWR_RD1	500_01_s _ 201	9_167					
		Comn	nent Cod	le				
V1 : Contro easements		grass and wee	ds on th	e levee slo	pes	and		
Inspector Comment								
	opecie. Sommon							

No Photos

LM Start	7.15	Rating **	М	Issue No.		2560
LM End	7.15	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.82420	8 °	38.824208°
пеш				-121.72279	3°	-121.722793°
DWR ID	20047					

#### Comment Code

#### Inspector Comment

FS\_ID:28923 DS\_ID:20047 EP\_NO: 10048

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: An abandoned pipe. Highly deteriorated pipe on river bank.Needs proper abandonment.Not found- Siphon breaker at

landward levee toe.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch steel irrigation discharge pipe and a 1-inch conduit through the levee, 4.5 feet below the crown. Pump in a metal shed on the riverbank. Gate valve on the waterside (WS) end. Service pole and 24-inch concrete standpipe at the landside (LS) toe. Installed by USACE in 1958. (10-inch steel irrigation discharge pipe through the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10048, 1974 - Virgil J. King) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 7.22)]. FS Date: 1/9/2014

#### Photo 1 of 3: UCIP\_SP\_2019\_28923\_53202.jpg



WS view: dilapidated and abandoned CM pump house on berm. Pipe and gate valve also on berm.

# **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	7.15	Rating **	М	Issue No.	2	2560 (cont)
LM End	7.15	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		38.824208	3°	38.824208
пеш				-121.722793	3°	-121.722793 °
DWR ID	20047					

# Comment Code

#### Inspector Comment

FS\_ID:28923 DS\_ID:20047 EP NO: 10048

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: An abandoned pipe. Highly deteriorated pipe on river bank. Needs proper abandonment. Not found-Siphon breaker at

landward levee toe.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch steel irrigation discharge pipe and a 1-inch conduit through the levee, 4.5 feet below the crown. Pump in a metal shed on the riverbank. Gate valve on the waterside (WS) end. Service pole and 24-inch concrete standpipe at the landside (LS) toe. Installed by USACE in 1958. (10-inch steel irrigation discharge pipe through the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10048, 1974 - Virgil J. King) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 7.22)]. FS Date: 1/9/2014

LM Start	7.15	Rating **	М	Issue No.	2560 (cont)
LM End	7.15	Issue Type +	En	Location *	

# Photo 2 of 3: UCIP\_SP\_2019\_28923\_53201.jpg



WS view: deteorated and abandoned steel pipe on river bank.

# Photo 3 of 3: UCIP\_SP\_2019\_28923\_53200.jpg



LS view: service pole and switch board on levee toe. No other apurtenances found on landside.

# Levee Inspection Report By Mile - Spring 2019

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	7.18	Rating **	M	Issue No.		134
LM End	7.20	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	titud	le/Longitude
Calegory				Start		End
Item	Vegetatio	n		38.8246	52 °	38.824908 °
пеш				-121.7227	91 °	-121.722817 °
DWR ID	DWR_RD1	500_01_f _ 201	8_134			·
		Comn	nent Cod	le		
V6 : Lands	caping					
		Inspecto	or Comm	nent		
V6 : Lands	scaping	Inspecto	or Comm	nent		

No Photos

LM Start	7.22	Rating **	М	Issue No.		168		
LM End	7.44	Issue Type +	Ma	Location *		LS		
Cotogon Earthen Levee				GPS Latitude/Longitude				
Calegory	Category					End		
Item	Vegetation			38.82509	91 °	38.828230 °		
пеш				-121.72289	91 °	-121.723953 °		
DWR ID	DWR_RD1	500_01_s _ 201	9_168					
	Comment Code							
V1 : Contro	V1 : Control annual grass and weeds on the levee slopes and							

Inspector Comment

easements.

No Photos

LM Start	7.49	Rating **	М	Issue No.	16		
LM End	7.49	Issue Type +	En	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Encroach	38.8289	44°	38.828944 °			
пеш				-121.724329 °		-121.724329°	
DWR ID	DWR_RD1	500_01_f _ 201	7_16				
		Comn	nent Cod	le			
EQ : Equip	ment						
	Inspector Comment						

Photo 1 of 1: SP\_2019\_RD1500\_189\_16\_20190304\_00007.jpg



View of the equipment along the levee toe on the landward side of the levee looking upstream. Spring 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	7.65	Rating **	M	Issue No.		166
LM End	8.09	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Vegetatio	n		38.8308	40°	38.835875°
пеш				-121.7258	34°	-121.730362°
DWR ID	DWR_RD1	500_01_s _ 201	9_166			
		Comn	nent Cod	le		
V1 : Contro easements		grass and wee	ds on th	e levee slop	oes a	and
		Inspecto	or Comm	nent		

No Photos

LM Start	7.72	Rating **	М	Issue No.		2561
LM End	7.72	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study	,	38.83163	38°	38.831638 °
пеш				-121.72658	30°	-121.726580 °
DWR ID	20049					

#### Comment Code

#### Inspector Comment

FS\_ID:50199 DS\_ID:20049 EP\_NO: 8147

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016: New pumps installed at LS toe ditch, could not find permit for this work. No signs of leakage or excessive vegetation growth in alignment with the pipe. Riser silted in; recommend installing a lid. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)01/10/2014:Not found- slide gate in 48-inch corrugated metal riser at waterside toe. Repair works under way. Contact LMA for repair works information. Sign of leaky pipe and siphon breaker. This needs detailed investigation. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, 4.8 feet below the crown. Slant pump mounted on a steel structure at the riverbank. 4-foot by 4-foot concrete distribution box at the landside (LS) toe with newly installed pumps with shutoff valves. (Replacement of a discharge pipe through the levee with a new 12-inch steel discharge pipe authorized under Permit No. 8147, 1972 - J. A. Driver). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 7.79)]. FS Date: 8/29/2016

#### Photo 1 of 3: UCIP\_SP\_2019\_50199\_53204.jpg



WS view: slant pump on steel platform on end of berm.

# Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	7.72	Rating **	М	Issue No.	2	2561 (cont)
LM End	7.72	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	IP Field Study		38.83163	8 °	38.831638 °
пеш				-121.72658	0 °	-121.726580 °
DWR ID	20049					

#### Comment Code

#### Inspector Comment

FS ID:50199 DS\_ID:20049 EP NO: 8147

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016: New pumps installed at LS toe ditch, could not find permit for this work. No signs of leakage or excessive vegetation growth in alignment with the pipe. Riser silted in; recommend installing a lid. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)01/10/2014:Not found- slide gate in 48-inch corrugated metal riser at waterside toe. Repair works under way. Contact LMA for repair works information. Sign of leaky pipe and siphon breaker. This needs detailed investigation. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, 4.8 feet below the crown. Slant pump mounted on a steel structure at the riverbank. 4-foot by 4-foot concrete distribution box at the landside (LS) toe with newly installed pumps with shutoff valves. (Replacement of a discharge pipe through the levee with a new 12-inch steel discharge pipe authorized under Permit No. 8147, 1972 - J. A. Driver). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 7.79)]. FS Date: 8/29/2016

LM Start	7.72	Rating **	М	Issue No.	2561 (cont)
LM End	7.72	Issue Type +	En	Location *	

# Photo 2 of 3: UCIP\_SP\_2019\_50199\_53203.jpg



WS view: sign of leakage- excessive vegetation on levee slope.

#### Photo 3 of 3: UCIP\_SP\_2019\_50199\_53207.jpg



LS view: steel riser with siphon breaker (bottom) and concrete distribution box on levee toe (top).

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	7.96	Rating **	М	Issue No.		2562
LM End	7.96	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.83426	0 °	38.834260 °
пеш				-121.72956	6°	-121.729566 °
DWR ID	20051					

#### Comment Code

#### Inspector Comment

FS\_ID:28323 DS\_ID:20051 EP\_NO: 13882

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Power pole on landside. 2-inch conduit through the levee. Service box on waterside. Concrete pad on waterside. Not found- Concrete distribution box on landward side; not found- gate valve on waterside. Need proper abandonment. Pipe visible on river bank, waterside levee slope and landside field.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch steel irrigation discharge pipe through the levee, 4.9 feet below the crown. 12-inch steel irrigation discharge pipe through the levee, 5 feet below the crown. 1.5-inch electrical conduit through the levee, 4 feet below the crown. 1.5-inch electrical conduit through the levee, 4 feet below the crown. Pump at the riverbank. Pump switch and gate valve on the waterside (WS) slope. Meter pole at the landside (LS) toe. Concrete distribution box on the LS. Installed by USACE in 1959. (6-inch steel irrigation discharge pipe through the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10062, 1974 - Pauline Moroni. Installation of a 12-inch steel pipe through the levee authorized under Permit No. 13882, 1984 - Ted A. Moroni). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 8.04)].

FS Date: 1/10/2014

LM Start	7.96	Rating **	M	Issue No.	2562 (cont)
I M End	7.96	Issue Type +	En	Location *	



WS view: CMP with air vent (right), concrete pad (left), and switch panel (left) on levee slope.

#### Photo 2 of 3: UCIP\_SP\_2019\_28323\_52124.jpg



WS view: abandoned steel pipe exposed on river bank.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	7.96	Rating **	М	Issue No.	2	2562 (cont)
LM End	7.96	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	e/Longitude	
Calegory				Start		End
Item	DWR UC	IP Field Study		38.83426	0 °	38.834260 °
пеш			-121.72956	6°	-121.729566 °	
DWR ID	20051					

#### Comment Code

#### Inspector Comment

FS\_ID:28323 DS\_ID:20051 EP\_NO: 13882

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 1/10/2014

UCIP Comments: Power pole on landside. 2-inch conduit through the levee. Service box on waterside. Concrete pad on waterside. Not found- Concrete distribution box on landward side; not found- gate valve on waterside. Need proper abandonment. Pipe visible on river bank, waterside levee slope and landside field.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch steel irrigation discharge pipe through the levee, 4.9 feet below the crown. 12-inch steel irrigation discharge pipe through the levee, 5 feet below the crown. 1.5-inch electrical conduit through the levee, 4 feet below the crown. 1.5-inch electrical conduit through the levee, 4 feet below the crown. Pump at the riverbank. Pump switch and gate valve on the waterside (WS) slope. Meter pole at the landside (LS) toe. Concrete distribution box on the LS. Installed by USACE in 1959. (6-inch steel irrigation discharge pipe through the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10062, 1974 - Pauline Moroni. Installation of a 12-inch steel pipe through the levee authorized under Permit No. 13882, 1984 - Ted A. Moroni). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 8.04)].

Photo 3 of 3: UCIP\_SP\_2019\_28323\_52123.jpg



LS view: outlet steel pipe across the residential road off the levee toe on field.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	8.35	Rating **	М	Issue No.		2563
LM End	8.35	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lati	tud	e/Longitude
Calegory			Start		End	
Item	DWR UC	IP Field Study		38.83944	3°	38.839446°
пеш				-121.72890 <sup>-</sup>	1°	-121.728901 °
DWR ID	20053					

#### Comment Code

#### Inspector Comment

FS ID:28324 DS\_ID:20053 EP NO: 10064

LM End

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Looks abandoned as service pole not found.May

need proper abandonement.

8.35

FIELD\_STRUCT\_DESC: 24-inch by 24-inch concrete box irrigation discharge culvert through the levee, 13 feet below the crown. Two concrete cutoff walls. Pump on a 6-foot-diameter concrete pump well on the berm. Slide gate in a 42-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. 4.5-foot by 6-foot concrete distribution box at the landside (LS) toe. Installed by Reclamation District No. 1500 in 1920. Improvements made by USACE in 1955. (24-inch by 24-inch concrete box irrigation discharge culvert through the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10064, 1974 - Paul Donald Nix). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 8.44), 36-inch pipe referenced]. FS Date: 1/10/2014

Rating \*\* M Issue No. 8.35 2563 (cont) LM Start

En

Issue Type +

Location '



WS view: slide gate in CMP riser on levee slope. Looks abandoned.

#### Photo 2 of 3: UCIP\_SP\_2019\_28324\_52130.jpg



WS view: vertical pump on concrete sump on levee berm. Looks abandoned.

Location LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

Rating : Acceptable Minimally Acceptable U: Unacceptable

N: Not Inspected/Rated C: Corrected

Issue Type

Ma : Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	8.35	Rating **	М	Issue No.	2	2563 (cont)	
LM End	8.35	Issue Type +	En	Location *			
Category	Suppleme		GPS La	atitud	e/Longitude		
Calegory						End	
Item	DWR UC	IP Field Study		38.8394	46°	38.839446	0
пеш				-121.7289	01 °	-121.728901	0
DWR ID	20053						

#### Comment Code

#### Inspector Comment

FS ID:28324 DS\_ID:20053 EP NO: 10064

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Looks abandoned as service pole not found.May

need proper abandonement.

FIELD\_STRUCT\_DESC: 24-inch by 24-inch concrete box irrigation discharge culvert through the levee, 13 feet below the crown. Two concrete cutoff walls. Pump on a 6-foot-diameter concrete pump well on the berm. Slide gate in a 42-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. 4.5-foot by 6-foot concrete distribution box at the landside (LS) toe. Installed by Reclamation District No. 1500 in 1920. Improvements made by USACE in 1955. (24-inch by 24-inch concrete box irrigation discharge culvert through the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10064, 1974 - Paul Donald Nix). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 8.44), 36-inch pipe referenced].

FS Date: 1/10/2014

## Photo 3 of 3: UCIP\_SP\_2019\_28324\_52129.jpg



LS view: concrete distribution box on levee toe.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	8.67	Rating **	М	Issue No.		2564
LM End	8.67	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P Field Study		38.8422	18°	38.842218 °
пеш				-121.7257	28 °	-121.725728 °
DWR ID	20054					

## Comment Code

#### Inspector Comment

FS\_ID:28343 DS\_ID:20054 EP\_NO: 5518

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Not found- siphon breaker on landward shoulder.

#### Pump removed.

FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe through the levee, 2.5 feet below the crown. Corrugated metal cutoff wall. Pump on concrete platform on the riverbank. Siphon breaker on the landside (LS) shoulder. 1-inch conduit installed in joint trench. Meter pole at the LS toe. Pipe discharges into a 4-foot by 4-foot concrete distribution box on the LS. (Installation of a 10-inch irrigation discharge pipe through the levee with a pump and a discharge box authorized under Permit No. 5518, 1966 - Irving E. Bundock, [RM 92.9]).

FS Date: 1/10/2014

LM Start	8.67	Rating **	М	Issue No.	2564 (cont)
LM End	8.67	Issue Type +	En	Location *	

## Photo 1 of 3: UCIP\_SP\_2019\_28343\_52145.jpg



WS view: U type concrete headwall, pipe, and pump on river bank.

#### Photo 2 of 3: UCIP SP 2019 28343 52144.jpg



WS view: pipe, pump (removed and capped with plywood), and gate valve on river bank.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	8.67	Rating **	М	Issue No.	2	2564 (cont)
LM End	8.67	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lati	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.84221	3°	38.842218
пеш				-121.725728	3°	-121.725728
DWR ID	20054					

## Comment Code

#### Inspector Comment

FS\_ID:28343 DS\_ID:20054 EP\_NO: 5518

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Not found- siphon breaker on landward shoulder.

#### Pump removed.

FIELD\_STRUCT\_DESC: 10-inch steel irrigation discharge pipe through the levee, 2.5 feet below the crown. Corrugated metal cutoff wall. Pump on concrete platform on the riverbank. Siphon breaker on the landside (LS) shoulder. 1-inch conduit installed in joint trench. Meter pole at the LS toe. Pipe discharges into a 4-foot by 4-foot concrete distribution box on the LS. (Installation of a 10-inch irrigation discharge pipe through the levee with a pump and a discharge box authorized under Permit No. 5518, 1966 - Irving E. Bundock, [RM 92.9]).

FS Date: 1/10/2014

Photo 3 of 3: UCIP\_SP\_2019\_28343\_52143.jpg



LS view: concrete distribution box on landside toe.

LM Start	8.72	Rating **	M	Issue No.		18			
LM End	8.72	Issue Type +	En	Location *	LS				
Category Earthen Levee				GPS Latitude/Longitude					
Calegory	Category					End			
Item	Encroach	ments		38.842673 °		38.842673 °			
item				-121.72644	12 °	-121.726442 °			
DWR ID DWR_RD1500_01_f _ 2018_18									
Comment Code									

#### BU: Building

#### Inspector Comment

#### Photo 1 of 1: SP\_2019\_RD1500\_189\_18\_20190304\_00008.jpg



The corner of the building has encroached into the toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

	_						
LM Start	8.79	Rating **	С	Issue No.		109	
LM End	8.79	Issue Type +	En	Location *		LS	
Category	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End	
Item	Encroach	ments		38.8434	81 °	38.843481 °	
пеш				-121.7272	56°	-121.727256 °	
DWR ID	DWR_RD1	500_01_f _ 201	7_109				
		Comn	nent Cod	le			
DE : Debri	S						
		Inspecto	or Comm	nent			
Abandone	Abandoned pipe is embedded into levee slope.						

No Photos

LM Start	8.95	Rating **	М	Issue No.		2565	
LM End	8.95	Issue Type +	En	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.8455	78°	38.845578	0
пеш				-121.72840	06°	-121.728406	0
DWR ID	20055						

## Comment Code

#### Inspector Comment

FS\_ID:28363 DS ID:20055 EP\_NO: 8503

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Looks abandoned. No pump found on WS.New well near landside. May need proper abandonement. Exposed pipe on waterside. Found steel plate closed pipe on landside.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 12-inch steel irrigation discharge pipe through the levee, 3.8 feet below the crown. Pump on concrete pad with headwall at the riverbank. Siphon breaker in a 24inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. 1.25-inch conduit through the levee, 3 feet below the crown. Meter pole with switch panel at the landside (LS) toe. Concrete distribution box at the LS toe. (12-inch steel irrigation discharge pipe through the levee and slant pump retained under Permit No. 8503, 1972 - James T. Munson). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 9.04), 10-inch pipe referenced]. FS Date: 1/10/2014

Photo 1 of 3: UCIP\_SP\_2019\_28363\_52167.jpg



WS view: siphon breaker in CMP riser on levee slope.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	8.95	Rating **	М	Issue No.	2	2565 (cont)
LM End	8.95	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.84557	8 °	38.845578
пеш				-121.72840	6°	-121.728406
DWR ID	20055					

Comment Code

Inspector Comment FS\_ID:28363

DS\_ID:20055 EP\_NO: 8503

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Looks abandoned. No pump found on WS.New well near landside.May need proper abandonement.Exposed pipe on waterside. Found steel plate closed pipe on landside.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 12-inch steel irrigation discharge pipe through the levee, 3.8 feet below the crown. Pump on concrete pad with headwall at the riverbank. Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. 1.25-inch conduit through the levee, 3 feet below the crown. Meter pole with switch panel at the landside (LS) toe. Concrete distribution box at the LS toe. (12-inch steel irrigation discharge pipe through the levee and slant pump retained under Permit No. 8503, 1972 - James T. Munson). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 9.04), 10-inch pipe referenced].

FS Date: 1/10/2014

LM Start	8.95	Rating **	М	Issue No.	2565 (cont)
LM End	8.95	Issue Type +	En	Location *	

#### Photo 2 of 3: UCIP\_SP\_2019\_28363\_52166.jpg



WS view: inlet steel pipe with gate valve on river bank.

#### Photo 3 of 3: UCIP\_SP\_2019\_28363\_52165.jpg



LS view: pipe end capped with steel plate on levee toe. Looks abandoned.

## **Levee Inspection Report By Mile - Spring 2019**

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	9.03	Rating **	М	Issue No.	133		
LM End	9.03	Issue Type +	En	Location *	LS		
Earthen Levee				GPS Lat	ituc	le/Longitude	
Category				Start	End		
Item	Encroach	ments		38.84676	2°	38.846762	
пеш				-121.72814	1 °	-121.728141	
DWR ID DWR_RD1500_01_f _ 2018_133							
	Comment Code						

TR: Tree or limb

Inspector Comment

Fallen walnut tree from orchard is blocking access at the landside toe.

LM Start	9.06	Rating **	M	Issue No.		165		
LM End	10.17	Issue Type +	Ma	Location *	WS			
Category	Earthen L	Earthen Levee GPS Latitude			e/Longitude			
Calegory				Start		End		
Item	Vegetatio	n		38.847115°		38.858511	0	
пеш				-121.7279	05 °	-121.728519	0	
DWR ID	DWR_RD1	500_01_s _ 201	9_165					
	Comment Code							
V1 : Contro	V1 : Control annual grass and weeds on the levee slopes and							

easements.

Inspector Comment

No Photos

No Photos

N: Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	9.13	Rating **	М	Issue No.		2566
LM End	9.13	Issue Type +	En	Location *		
Supplemental				GPS Latitude/Longitude		
Category				Start		End
Item	DWR UC	IP Field Study		38.8478	41 °	38.847841 °
пеш				-121.7271	72 °	-121.727172 °
DWR ID	20056					

# Inspector Comment

Comment Code

FS\_ID:28364 DS\_ID:20056 EP\_NO: 5598

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Not found- Wood headwall 18 ft from landward toe.

Not found- Flap gate on landward side. No outlet structure found. Only a capped pipe found, but not sure whether it is connected to the crossing.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe and electrical conduit through the levee, 4.8 feet below the crown. One metal cutoff wall. Slant pump on steel structure on the berm. Siphon breaker in an 8.5-inch steel pipe riser on the landside (LS) shoulder. Meter pole on the LS toe. Wooden headwall with flap gate off the LS toe. Pipe discharges into field. Installed in 1967. (Construction of a pumping plant and installation of a discharge pipe through the levee authorized under Permit No. 5598, 1966 - Arthur C. James Jr. Existing encroachments retained under Permit No. 8505, 1972 - Arthur C. James Jr.). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 1/10/2014

LM Start	9.13	Rating **	М	Issue No.	2566 (cont)
LM End	9.13	Issue Type +	En	Location *	



WS view: slant pump on steel platform on levee berm. Excessive oil leak from the pump.

#### Photo 2 of 3: UCIP\_SP\_2019\_28364\_52175.jpg



LS view: air vent in steel pipe riser on levee slope.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	9.13	Rating **	М	Issue No.	2	2566 (cont)
LM End	9.13	Issue Type +	En	Location *		
Supplemental				GPS Latitude/Longitude		
Category				Start		End
Item	DWR UC	IP Field Study		38.84784	1°	38.847841 °
пеш				-121.72717	2°	-121.727172 °
DWR ID	20056					

# Comment Code

## Inspector Comment

FS ID:28364 DS\_ID:20056 EP NO: 5598

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Not found- Wood headwall 18 ft from landward toe.

Not found- Flap gate on landward side. No outlet structure found. Only a capped pipe found, but not sure whether it is connected to the crossing.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe and electrical conduit through the levee, 4.8 feet below the crown. One metal cutoff wall. Slant pump on steel structure on the berm. Siphon breaker in an 8.5-inch steel pipe riser on the landside (LS) shoulder. Meter pole on the LS toe. Wooden headwall with flap gate off the LS toe. Pipe discharges into field. Installed in 1967. (Construction of a pumping plant and installation of a discharge pipe through the levee authorized under Permit No. 5598, 1966 - Arthur C. James Jr. Existing encroachments retained under Permit No. 8505, 1972 - Arthur C. James Jr.). [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 1/10/2014

## Photo 3 of 3: UCIP\_SP\_2019\_28364\_52173.jpg



LS view: capped outlet pipe on levee toe.

LM Start	9.26	Rating **	U	Issue No.		132	
LM End	9.33	Issue Type +	En	Location *	WS		
Category	Catagoni Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End	
Item	Encroach	ments		38.84903	32°	38.849619	
пеш				-121.72512	26°	-121.724161	
DWR ID	DWR_RD1	500_01_f _ 201	8_132				

#### Comment Code

UR: Urban

#### Inspector Comment

Multiple trailers and constructed shacks on the waterside berm are taking up long-term residence.

#### Photo 1 of 1: SP\_2019\_RD1500\_189\_132\_20190304\_00074.jpg



View of trailers and shacks on the waterside berm. Fall 2018.

## Levee Inspection Report By Mile - Spring 2019

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	9.40	Rating **	A/W	Issue No.		74
LM End	9.57	Issue Type +	Ob	Location *	WS	
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Vegetatio	n		38.8502	67°	38.852564 °
пеш				-121.7232	75°	-121.723179°
DWR ID	DWR_RD1	500_01_s _ 201	2_74			
		Comn	nent Cod	le		
V8 : Enviro	onmental F	Requirements.				
		Inspecto	or Comm	nent		

LM Start	9.40	Rating **	A/W	Issue No.	74 (cont)
LM End	9.57	Issue Type +	Ob	Location *	WS



View of the revegetation site along the edge of the berm on the waterward side of the levee looking downstream. Spring 2016.

Photo 2 of 2: SP\_2019\_RD1500\_189\_74\_20190304\_00030.jpg



Sign for the revegetation site by USACE.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	9.66	Rating **	М	Issue No.		2567	
LM End	9.66	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.85336	64°	38.853364°	
пеш				-121.7246	17°	-121.724617 °	
DWR ID	20057						

#### Comment Code

#### Inspector Comment

FS ID:28365 DS\_ID:20057 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Looks abandoned. Pump has been removed. No outlet pipe found. Not found- Wooden service panel and 3x5 foot concrete distribution box at landward shoulder. May need proper abandonment.

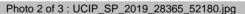
FIELD\_STRUCT\_DESC: 14-inch steel irrigation discharge pipe through the levee, 4.2 feet below the crown. Pump and gate valve on a concrete pump platform on the bank. Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the waterside (WS) shoulder. Wooden switch panel and pole on the WS slope. 3-foot by 5-foot concrete distribution box at the landside (LS) toe. (14-inch steel irrigation discharge pipe through the levee, pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10069, 1974 -Robert Reel). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 9.77)]. FS Date: 1/10/2014

LM Start	9.66	Rating **	М	Issue No.	2567 (cont)
LM End	9.66	Issue Type +	En	Location *	





WS view: CMP riser with siphon breaker on levee slope.





WS view: siphon breaker obstructed by dumped-trash in CMP riser.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	9.66	Rating **	М	Issue No.	2	2567 (cont)	
LM End	9.66	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Lat	atitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.85336	4 °	38.853364	٥
пеш				-121.72461	7 °	-121.724617	0
DWR ID	20057						

# Comment Code

#### Inspector Comment

FS\_ID:28365 DS\_ID:20057 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Looks abandoned. Pump has been removed. No outlet pipe found. Not found- Wooden service panel and 3x5 foot concrete distribution box at landward shoulder. May need proper abandonment.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation discharge pipe through the levee, 4.2 feet below the crown. Pump and gate valve on a concrete pump platform on the bank. Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the waterside (WS) shoulder. Wooden switch panel and pole on the WS slope. 3-foot by 5-foot concrete distribution box at the landside (LS) toe. (14-inch steel irrigation discharge pipe through the levee, pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10069, 1974 - Robert Reel). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 9.77)].

#### Photo 3 of 3: UCIP\_SP\_2019\_28365\_52179.jpg



LS view: U type concrete headwall, pipe, gate valve, and pump (removed and plugged with plywood) on river bank.

#### Rating \*\* Issue No. 9.71 A/\/ 162 LM Start Issue Type + Location \* WS LM End 9.71 Earthen Levee GPS Latitude/Longitude Category Start End Slope Stability 38.853564° 38.853564 -121.725379° -121.725379 DWR ID DWR\_RD1500\_01\_s \_ 2017\_162

#### Comment Code

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

#### Inspector Comment

The area is heavily accessed by trailer residents and fishermen. Recommend monitoring.

#### Photo 1 of 1: SP\_2019\_RD1500\_189\_162\_20190304\_00080.jpg



View of slope stability on waterside slope. Spring 2017.

## **Levee Inspection Report By Mile - Spring 2019**

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	9.80	Rating **	С	Issue No.		126				
LM End	9.80	Issue Type +	En	Location *		WS				
Category	Earthen L	evee		GPS La	atitud	le/Longitude				
Calegory				Start		End				
Item	Encroach	ments		38.8535	76°	38.853576 °				
пеш				-121.7271	23 °	-121.727123 °				
DWR ID	DWR_RD1	500_01_s _ 201	8_126							
		Comn	nent Cod	le						
DE : Debri	s									
	Inspector Comment									
There is a burned trailer and trash on the waterside shoulder.										

No Photos

LM Start	9.85	Rating **	С	Issue No.	130		
LM End	9.85	Issue Type +	En	Location *	WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category			Start		End		
Item	Encroachments			38.8539	86°	38.853986°	
item			-121.727838 °		3 ° -121.727838 °		
DWR ID	DWR_RD1	500_01_f _ 201	8_130				
		Comn	nent Cod	le			
UR : Urbar	า						
Inspector Comment							
Trailer parked on the waterside berm taking up long-term residence.							

No Photos

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	10.12	Rating **	М	Issue No.		2568	
LM End	10.12	Issue Type +	En	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory						End	
Item	DWR UC	IP Field Study		38.857853	3°	38.857853	0
пеш				-121.728222	°	-121.728222	0
DWR ID	20058						

## Inspector Comment

Comment Code

FS\_ID:50069 DS\_ID:20058 EP\_NO: 10068

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 01/10/2014Surface erosion along pipe alighment on landside.30-inch concrete pipe in CMP riser on waterside. 30-inch x 24-inch concrete culvert on landside.

FIELD\_STRUCT\_DESC: 24-inch by 30-inch reinforced concrete box irrigation discharge culvert diagonally through the levee, 13 feet below the crown. Two concrete cutoff walls. Slant pump on the riverbank. Slide gate in a 40-inch by 40-inch concrete surge box on the berm. Power pole and switch panel on the waterside (WS) slope. Concrete distribution box at the landside (LS) toe. Installed by Reclamation District No. 1500 in 1920. (24-inch by 30-inch reinforced concrete box irrigation discharge culvert diagonally through the levee, slant pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10068, 1974 - Cecil Reel). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 10.22)].

FS Date: 1/10/2014

LM Start	10.12	Rating **	М	Issue No.	2568 (cont)
LM End	10.12	Issue Type +	En	Location *	



WS view: pipe and pump with appurtenances on river bank. Pump removed and plugged with plywood.

#### Photo 2 of 3: UCIP\_SP\_2019\_50069\_52189.jpg



LS view: surface erosion along pipe alighment on landside.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	10.12	Rating **	М	Issue No.	2	2568 (cont)	
LM End	10.12	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Lati	atitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.857853	3°	38.857853	
пеш				-121.728222	2 °	-121.728222	
DWR ID	20058						

# Inspector Comment

Comment Code

FS\_ID:50069 DS\_ID:20058 EP\_NO: 10068

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 01/10/2014Surface erosion along pipe alighment on landside.30-inch concrete pipe in CMP riser on waterside. 30-inch x

24-inch concrete culvert on landside.
FIELD\_STRUCT\_DESC: 24-inch by 30-inch reinforced concrete box irrigation discharge culvert diagonally through the levee, 13 feet below the crown. Two concrete cutoff walls. Slant pump on the riverbank. Slide gate in a 40-inch by 40-inch concrete surge box on the berm. Power pole and switch panel on the waterside (WS) slope. Concrete distribution box at the landside (LS) toe. Installed by Reclamation District No. 1500 in 1920. (24-inch by 30-inch reinforced concrete box irrigation discharge culvert diagonally through the levee, slant pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10068, 1974 - Cecil Reel). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M

Manual 128, March 1960, (HLM 10.22)].

FS Date: 1/10/2014

Photo 3 of 3 : UC	CIP_SP_2019_	50069_52192.jp	g
		A A STATE OF THE S	
A Commence of the Commence of			

LS view: outlet of concrete box culvert on levee toe.

LM Start	10.25	Rating **	M	Issue No.		115	
LM End	10.25	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS La	titud	le/Longitude	
				Start		End	
Item	Animal Control			38.85958	85 °	38.859585	0
пеш				-121.72918	88°	-121.729188	0
DWR ID	DWR_RD1	500_01_f _ 201					
Comment Code							

A1: Exterminate rodents and backfill and compact or grout burrows.

#### Inspector Comment

There are active rodent holes at the landside toe.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	10.61	Rating **	С	Issue No.		124	
LM End	10.61	Issue Type +	En	Location *		WS	
Category	GPS La	atitud	e/Longitude				
Category				Start		End	
Item	Encroachments			38.8611	71 °	38.861171 °	
item				-121.7353	37°	-121.735337 °	
DWR ID	DWR_RD1	500_01_s _ 201	8_124				
		Comn	nent Cod	le			
BU : Buildi	ng						
Inspector Comment							
Residence built on the waterside berm.							

No Photos

LM Start	10.70	Rating **	М	Issue No.		2569
LM End	10.70	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	titud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.86155	0°	38.861550°
item				-121.73700	6 °	-121.737006°
DWR ID	20059					

#### Comment Code

#### Inspector Comment

FS\_ID:28925 DS ID:20059 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pump removed. Obstructed siphon breaker in CMP

riser on landside.

FIELD STRUCT DESC: 12-inch steel irrigation discharge pipe through the levee, 4.3 feet below the crown. One cutoff wall. 1.5-inch conduit through the levee, 2 feet below the crown. Slant type centrifugal pumping plant on the riverbank removed during the winter months and a steel plate is bolted to the end of the pipe. Gate valve on the waterside (WS). Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the landside (LS) shoulder. 8-foot by 6-foot, inside measurements, concrete distribution box and meter pole with switch panel at the LS toe. (12-inch steel irrigation discharge pipe through the levee and slant type centrifugal pumping plant retained under Permit No. 8506, 1972 -Eugene C. Reel et al.). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 10.81)]. FS Date: 1/10/2014

Photo 1 of 3: UCIP\_SP\_2019\_28925\_53210.jpg



WS view: pipe, pump (removed and plugged with plywood), headwall, and appurtenances on river bank.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	10.70	Rating **	М	Issue No.	2	2569 (cont)
LM End	10.70	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		38.8615	50°	38.861550 °
пеш				-121.7370	06 °	-121.737006 °
DWR ID	20059					

## Comment Code

#### Inspector Comment

FS ID:28925 DS\_ID:20059 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pump removed. Obstructed siphon breaker in CMP

riser on landside.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation discharge pipe through the levee, 4.3 feet below the crown. One cutoff wall. 1.5-inch conduit through the levee, 2 feet below the crown. Slant type centrifugal pumping plant on the riverbank removed during the winter months and a steel plate is bolted to the end of the pipe. Gate valve on the waterside (WS). Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the landside (LS) shoulder. 8-foot by 6-foot, inside measurements, concrete distribution box and meter pole with switch panel at the LS toe. (12-inch steel irrigation discharge pipe through the levee and slant type centrifugal pumping plant retained under Permit No. 8506, 1972 -Eugene C. Reel et al.). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 10.81)].

FS Date: 1/10/2014

LM Start	10.70	Rating **	М	Issue No.	2569 (cont)
LM End	10.70	Issue Type +	En	Location *	

#### Photo 2 of 3: UCIP\_SP\_2019\_28925\_53209.jpg



LS view: siphon breaker in CMP riser (bottom) on levee slope and concrete distribution box (top) on levee toe.

#### Photo 3 of 3: UCIP\_SP\_2019\_28925\_53208.jpg



LS view: obstructed siphon breaker in CMP riser (bottom) on levee slope.

## Levee Inspection Report By Mile - Spring 2019

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	11.07	Rating **	С	Issue No.	113		
LM End	11.07	Issue Type +	En	Location *	WS		
Earthen Levee				GPS La	atituc	le/Longitude	
Category	Category			Start		End	
Item	Encroachments			38.8645	01 °	38.864501 °	
пеш				-121.7425	81 °	-121.742581 °	
DWR ID	DWR_RD1	500_01_f _ 201	8_113				
		Comn	nent Coo	le			
DE : Debri	DE : Debris						
Inspector Comment							

Abandoned burned vehicle that was left on the waterside berm.

No Photos

LM Start	11.22	Rating **	М	Issue No.		164	
LM End	11.74	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
ltom	Vegetatio	n		38.8654	99°	38.872286°	
пеш	Item				79 °	-121.748482°	
DWR ID DWR_RD1500_01_s _ 2019_164							
Comment Code							

No Photos

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

LM Start	11.30	Rating **	М	Issue No.		20	
LM End	11.30	Issue Type +	En	Location *		LS	
Category	evee	GPS Latitude/Longitude					
Calegory	Category					End	
Item	Vegetation			38.86638	33 °	38.866383 °	
пеш				-121.7459°	11 °	-121.745911 °	
DWR ID	DWR_RD1	500_01_s _ 201	2_20				
Comment Code							
V6 : Landscaping							

. .

Inspector Comment

Permitted landscape needs maintenance. (PN: 10041)



View of the landscaping on the landward side of the levee looking upstream. Fall 2015.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected A/W: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway		Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	11.34	Rating **	М	Issue No.		163	
LM End	11.83	Issue Type +	Ma	Location *		LS	
Category Earthen Levee			GPS L	atitud	le/Longitude		
Calegory				Start		End	
Item	Vegetation			38.8669	81 °	38.872091	0
пеш	item			-121.746184 °		-121.750071	0
DWR ID	DWR_RD1	500_01_s _ 201	9_163				
		Comn	nent Cod	le			
	V1 : Control annual grass and weeds on the levee slopes and easements.						
	Inspector Comment						

No Photos

LM Start	11.45	Rating **	М	Issue No.		M Issue No.		2570
LM End	11.45	Issue Type +	En	Location *				
Category	Suppleme	pplemental			titud	e/Longitude		
Calegory				Start		End		
Item	DWR UC	IP Field Study	,	38.86854	4°	38.868544 °		
item				-121.74647	'1 °	-121.746471 °		
DWR ID	20061							

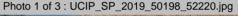
#### Comment Code

#### Inspector Comment

FS\_ID:50198 DS\_ID:20061 EP\_NO: 10041

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016 Depressions cited previously are a makeshift staircase and not an indication of a problem with pipe. Pipe partiallay exposed on LS slope which should be backfilled. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel -UCIP)01/10/2014 Depressions on both sides of the levee slope. It needs more investigation. Pump removed. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: 8-inch steel irrigation discharge pipe through the levee, 4 feet below the crown. One corrugated metal cutoff wall. Pump and gate valve on a concrete pump platform on the riverbank. Corrugated metal switch house on the waterside (WS) slope. Meter pole on the WS shoulder. 8-foot by 6-foot, inside dimensions, concrete distribution box on the landside (LS). Overhead power line crosses the levee. Pole at the LS toe. Installed by USACE in 1952. (8-inch steel irrigation discharge pipe through the levee, pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10041, 1974 - William J. Duffy Jr.) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 11.57)]. FS Date: 8/29/2016





WS view: pipe, pump (removed), headwall, and appurtenances on river bank.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	11.45	Rating **	М	Issue No.	2	2570 (cont)
LM End	11.45	Issue Type +	En	Location *		
Category	Supplemental			GPS Lat	itud	e/Longitude
Calegory	ategory			Start		End
Item	DWR UC	IP Field Study		38.86854	4 °	38.868544°
item		-121.74647	1°	-121.746471 °		
DWR ID	20061					

#### Comment Code

#### Inspector Comment

FS ID:50198 DS\_ID:20061 EP NO: 10041

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016 Depressions cited previously are a makeshift staircase and not an indication of a problem with pipe. Pipe partiallay exposed on LS slope which should be backfilled. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel -UCIP)01/10/2014 Depressions on both sides of the levee slope. It needs more investigation. Pump removed. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: 8-inch steel irrigation discharge pipe through the levee, 4 feet below the crown. One corrugated metal cutoff wall. Pump and gate valve on a concrete pump platform on the riverbank. Corrugated metal switch house on the waterside (WS) slope. Meter pole on the WS shoulder. 8-foot by 6-foot, inside dimensions, concrete distribution box on the landside (LS). Overhead power line crosses the levee. Pole at the LS toe. Installed by USACE in 1952. (8-inch steel irrigation discharge pipe through the levee, pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10041, 1974 - William J. Duffy Jr.) [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 11.57)]. FS Date: 8/29/2016

LM Start	11.45	Rating **	M	Issue No.	2570 (cont)
LM End	11.45	Issue Type +	Fn	Location *	



LS view: depressions along the pipe alighment on levee slope. It needs detailed investigation.





LS view: concrete distribution box on levee toe. Exposed pipe and depression (top) visible on levee slope.

Location Rating Issue Type Ma : Maintenance Deficiency LS: Land Side N/A: Not Applicable N: Not Inspected/Rated : Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

## Levee Inspection Report By Mile - Spring 2019

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	11.45	Rating **	М	Issue No.	114	
LM End	11.45	Issue Type +	En	Location *		LS
Category Earthen Levee				GPS La	atitud	e/Longitude
Calegory				Start		End
Itom	Encroach	ments		38.8685	77 °	38.868577 °
пеш	Item				87 °	-121.746487 °
DWR ID	DWR ID DWR_RD1500_01_f _ 2015_114					
Comment Code						

Con

ST : Stairway

#### Inspector Comment

Landowner has dug stairs on the landside slope to irrigation equipment.

LM Start	11.45	Rating **	М	Issue No.	114 (cont)
LM End	11.45	Issue Type +	En	Location *	LS



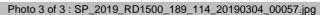
Perspective view of the concrete box on the landward side of the levee looking upstream. Fall 2015.

Photo 2 of 3: SP\_2019\_RD1500\_189\_114\_20190304\_00056.jpg



There is erosion at the levee toe around the concrete box. There are also stairs leading down the slope. Fall 2015.

LM Start	11.45	Rating **	М	Issue No.	114 (cont)
LM End	11.45	Issue Type +	En	Location *	LS





There is slight erosion on the waterward side of the levee where the pipe seems to run through the levee. Fall 2015.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	11.80	Rating **	A/W	Issue No.		88	
LM End	12.26	Issue Type +	Ма	Location *		WS	
Category Supplemental			GPS Lat	itud	e/Longitude		
Calegory				Start		End	
Item		ACE Erosion S	Survey,	38.87184	8 °	38.869139	0
пеш	DRAFT	DRAFT			9°	-121.757108	0
DWR ID	DWR_RD1	500_01_f _ 201	8_88				

No Photos

#### Inspector Comment

Comment Code

2017 Site ID: SAC 95.8 L

Status: Eroding

DWR ID

2017 Field Notes: Sites 95.8 and 96.2 combined.

Site History: 1997 - No toe on the large upstream rubble (mix of broken concrete, bricks, rock, and steal) - should be replaced. Oversized bank. 2001 - New slump at the downstream end. 2003 - Some minor bank retreat at the downstream end. 2004 - Some new retreat at the downstream end. 2006 - Some new erosion, mainly on the steep slope and scarps. (Pumping station is not part of the erosion site.) 2010 -Minor new erosion. 2011 - Minor new erosion at the toe. 2015 - Fresh slumping

Rating \*\* LM Start 11.98 Μ Issue No. 160 Issue Type + Location \* WS LM End 12.74 Ma Earthen Levee GPS Latitude/Longitude Category End Start Vegetation 38.870944° 38.865717 Item -121.752311 ° -121.764026°

DWR\_RD1500\_01\_s \_ 2019\_160

Comment Code V1 : Control annual grass and weeds on the levee slopes and easements

Inspector Comment

No Photos

Location LS : Land Side N/A: Not Applicable WS: Water Side

Rating A: Acceptable : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C: Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma: Maintenance Deficiency Ob: Design & System Obsolescence

En: Enforcement

Page 58 of 132

CR : Crown

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	12.00	Rating **	М	Issue No.		2571
LM End	12.00	Issue Type +	En	Location *		
Category Supplemental			GPS Latitude/Longitude			
Calegory	Category		Start		End	
Itom	DWR UC	IP Field Study		38.87078	0°	38.870780°
Item			-121.75263	0°	-121.752630°	
DWR ID	20008					

## Comment Code

#### Inspector Comment

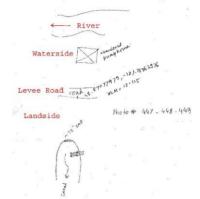
FS\_ID:41744 DS\_ID:20008 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: An abondoned pump house on waterside and a 72inch corrugated metal pipe on landside. The pipe discharges into irrigation ditch (canal). Water was flowing during the field visit. Needs to verify from LMA whether this pipe is through the levee or not. FIELD\_STRUCT\_DESC: [State Ranch Bend Pumping Plant] 1 of 2: 36inch by 42-inch reinforced concrete irrigation discharge culvert under the levee, 17 feet below the crown. Two concrete cutoff walls. Vertical pump on the riverbank. Slide gate on the waterside (WS) end. Wooden slide gate at the landside (LS) toe. Installed by USACE in 1947. (36inch by 42-inch reinforced concrete irrigation discharge culvert under the levee, vertical pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10073, 1974 -Sutter Mutual Water Company, [Station 356+02]. To comply with Condition No. TWENTY of Board Order No. 9809 with plans to remove the old Pumping Plant No. 1 authorized under Permit No. 9809-A, 1976 - Sutter Mutual Water Company). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 128, March 1960, (HLM 12.12), two 48-inch by 42-inch concrete culverts referenced]. FS Date: 1/10/2014

LM Start	12.00	Rating **	М	Issue No.	2571 (cont)
LM End	12.00	Issue Type +	En	Location *	

## Photo 1 of 3: UCIP\_SP\_2019\_41744\_51343.jpg



Sketch of Utility Crossing @HLM 12.115

## Photo 2 of 3: UCIP\_SP\_2019\_41744\_51345.jpg



WS view: abandoned concrete pump house. No pump and pipe found.

Location Rating + Issue Type Ma : Maintenance Deficiency LS: Land Side N/A: Not Applicable N: Not Inspected/Rated A : Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected En: Enforcement CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	12.00	Rating **	M	Issue No.	:	2571 (cont)		
LM End	12.00	Issue Type +	En	Location *				
Category Supplemental				GPS Latitude/Longitude				
Calegory	Dategory			Start		End		
Item	DWR UC	IP Field Study		38.87078	° o	38.870780 °		
Item			-121.75263	° o	-121.752630 °			
DWR ID	20008							

#### Comment Code

#### Inspector Comment

FS\_ID:41744 DS\_ID:20008 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: An abondoned pump house on waterside and a 72inch corrugated metal pipe on landside. The pipe discharges into irrigation ditch (canal). Water was flowing during the field visit. Needs to verify from LMA whether this pipe is through the levee or not. FIELD\_STRUCT\_DESC: [State Ranch Bend Pumping Plant] 1 of 2: 36inch by 42-inch reinforced concrete irrigation discharge culvert under the levee, 17 feet below the crown. Two concrete cutoff walls. Vertical pump on the riverbank. Slide gate on the waterside (WS) end. Wooden slide gate at the landside (LS) toe. Installed by USACE in 1947. (36inch by 42-inch reinforced concrete irrigation discharge culvert under the levee, vertical pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10073, 1974 -Sutter Mutual Water Company, [Station 356+02]. To comply with Condition No. TWENTY of Board Order No. 9809 with plans to remove the old Pumping Plant No. 1 authorized under Permit No. 9809-A, 1976 - Sutter Mutual Water Company). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 128, March 1960, (HLM 12.12), two 48-inch by 42-inch concrete culverts referenced]. FS Date: 1/10/2014



LS view: overview of irrigation ditch on toe of levee.

LM Start	12.01	Rating **	М	Issue No.		116		
LM End	12.01	Issue Type +	Ма	a Location *		LS		
Catagonia Earthen Levee				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Itom	Erosion /	Bank Caving		38.87073	o°	38.870730°		
Item				-121.75290	8°	-121.752908 °		
DWR ID	DWR_RD1	500_01_s _ 201	7_116			·		

#### Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

There is runoff erosion on the landside levee slope.

#### Photo 1 of 1: SP\_2019\_RD1500\_189\_116\_20190304\_00058.jpg



View of erosion on landside slope. Spring 2017.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## **Levee Inspection Report By Mile - Spring 2019**

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	12.12	Rating **	М	Issue No.		161
LM End	12.37	Issue Type +	Ma	Location *		LS
Earthen Levee			GPS La	atitud	e/Longitude	
Category				Start		End
Item	Vegetatio	n		38.8701	17°	38.869274°
пеш				-121.7546	92 °	-121.759149°
DWR ID	DWR_RD1	500_01_s _ 201	9_161			
		Comn	nent Cod	le		
V1 : Contro	ol annual g	rass and wee	ds on th	e levee slo	oes a	and
easements	S.					
		Inspecto	or Comm	nent		

No Photos

LM Start	12.42	Rating ""	IVI	issue ino.		24	
LM End	12.53	Issue Type +	En	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Encroach	ments		38.8688	34°	38.867492 °	
пеш				-121.7600	14 °	-121.760903 °	
DWR ID	DWR_RD1	500_01_s _ 201	2_24				
		Comn	nent Cod	le			
EQ : Equip	ment						
	Inspector Comment						

Photo 1 of 1 : SP\_2019\_RD1500\_189\_24\_20190304\_00010.jpg



View of the equipment on the landward side of the levee looking upstream. Fall 2015.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	12.55	Rating **	М	Issue No.		2572
LM End	12.55	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Calegory						End
Item	DWR UCI	IP Field Study		38.8672	54°	38.867254°
пеш				-121.7612	12 °	-121.761212°
DWR ID	20063					

#### Comment Code

#### Inspector Comment

FS\_ID:50197 DS\_ID:20063 EP\_NO: 10061

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016 Same as last inspection. (K. FAzel - UCIP)01/10/2014 Needs proper abandonement. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch corrugated metal gravity drainage pipe through the levee, 15 feet below the crown. Slide gate in a 4-foot by 4-foot concrete box at the waterside (WS) toe. Concrete box at the landside (LS) toe. Pipe crosses overflow area to the river. Installed by USACE in 1944. (18-inch corrugated metal gravity drainage pipe through the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10061, 1974 - Roger L. Matteoli). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 12.69)].

FS Date: 8/29/2016

LM Start	12.55	Rating **	М	Issue No.	2572 (cont)
LM End	12.55	Issue Type +	En	Location *	



WS view: slide gate (left) in concrete box at levee toe. Slide gate and the box mostly burried.

#### Photo 2 of 3: UCIP\_SP\_2019\_50197\_52424.jpg



LS view: concrete intake box on levee toe.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	12.55	Rating **	М	Issue No.	2	2572 (cont)	
LM End	12.55	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.86725	4 °	38.867254	0
пеш				-121.76121	2°	-121.761212	0
DWR ID	20063						

# Comment Code

#### Inspector Comment

FS\_ID:50197 DS\_ID:20063 EP\_NO: 10061

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016 Same as last inspection. (K. FAzel - UCIP)01/10/2014 Needs proper abandonement. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch corrugated metal gravity drainage pipe through the levee, 15 feet below the crown. Slide gate in a 4-foot by 4-foot concrete box at the waterside (WS) toe. Concrete box at the landside (LS) toe. Pipe crosses overflow area to the river. Installed by USACE in 1944. (18-inch corrugated metal gravity drainage pipe through the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10061, 1974 - Roger L. Matteoli). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 12.69)].

FS Date: 8/29/2016

# Photo 3 of 3: UCIP\_SP\_2019\_50197\_52423.jpg

LS view: silted CMP in concrete intake box on levee toe.

LM Start	12.57	Rating **	U	Issue No.		118	
LM End	12.57	Issue Type +	Ма	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Erosion /	Bank Caving		38.86710	8°	38.867108°	
пеш			-121.76149	8 °	-121.761498°		
DWR ID DWR_RD1500_01_f _ 2015_118							
	Comment Code						

E2: Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

Recommend backfilling erosion.

#### Photo 1 of 2: SP\_2019\_RD1500\_189\_118\_20190304\_00060.jpg



Updated view of erosion on the landside slope. Fall 2018.

## Levee Inspection Report By Mile - Spring 2019

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	12.57	Rating **	U	Issue No.		118 (cont)	
LM End	12.57	Issue Type +	Ма	Location *		WS	
Category Earthen Levee				GPS La	atitud	e/Longitude	
Category			Start		End		
Erosion / Bank Caving			38.8671	08°	38.867108 °		
item				-121.761498 °		8° -121.761498°	
DWR ID DWR_RD1500_01_f _ 2015_118							
		Comn	nent Cod	le			
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spe	ction.	
		Inspecto	or Comm	nent			
Recommend backfilling erosion.							



View of the erosion on the waterward side of the levee looking upstream. Fall 2015.

LM Start	12.78	Rating **	М	Issue No.		25	
LM End	12.86	Issue Type +	En	Location *	WS		
Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
ltom	Encroachments ltem			38.865429°		38.864777°	
item				-121.764684 °		° -121.765857 °	
DWR ID	DWR_RD1	500_01_s _ 201	2_25			·	
		Comn	nent Cod	de			
EQ : Equip	oment						
Inspector Comment							



View of the equipment on the waterside shoulder of the levee looking upstream. Fall 2015.

LM Start	12.91	Rating **	М	Issue No.		159	
LM End	13.93	Issue Type +	Ma	Location *		WS	
Category	evee	GPS L	atitud	le/Longitude			
Category				Start		End	
ltem Vegetation				38.8643	313°	38.857907 °	
				-121.766617 °		-121.782464 °	
DWR ID	DWR ID DWR_RD1500_01_s _ 2019_159						
		Comn	nent Cod	de			
		grass and wee	ds on th	e levee slo	pes	and	
easements	3.						
		Inspecto	or Comm	nent			

No Photos

## Levee Inspection Report By Mile - Spring 2019

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	13.01	Rating **	М	Issue No.		26	
LM End	13.01	Issue Type +	En	Location *		LS	
Category	evee	GPS La	atitud	le/Longitude			
Calegory				Start		End	
Encroachments				38.8634	38°	38.863438 °	
пеш				-121.768212 °		° -121.768212 °	
DWR ID DWR_RD1500_01_s _ 2019_26							
		Comn	nent Coo	le			
BU : Build	ing						
		Inspecto	or Comm	nent			



The building's backside was built into the toe of the levee.

LM Start	13.05	Rating **	С	Issue No.		992
LM End	13.05	Issue Type +	En	Location *		LS
Category Earthen Levee			GPS Latitude/Longitude			
Category			Start		End	
Item	Encroach	ments		38.8630	81 °	38.863081 °
пеш				-121.7687	81 °	-121.768781 °
DWR ID	DWR_RD1	500_01_s _ 201	2_992			·

Comment Code

EQ: Equipment

Inspector Comment

There are equipment and tires at this location.

No Photos

LM Start	13.78	Rating **	М	Issue No.		119	
LM End	13.82	Issue Type +	En	Location *	WS		
Category	Earthen L	evee		GPS Latitude/Longitude			
Category				Start		End	
ltem Encroachments			38.8596	79°	38.859201 °		
			-121.780862 °		-121.781276°		
DWR ID	DWR_RD1	500_01_f _ 201	5_119				
		Comn	nent Cod	le			
EQ : Equip	ment						
Inspector Comment							



View of the equipment on the crown of the levee looking upstream. Fall 2015.

## Levee Inspection Report By Mile - Spring 2019

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	13.96	Rating **	М	Issue No.		28	
LM End	13.96	Issue Type +	En	Location *		WS	
Category	Earthen L	.evee		GPS La	atitud	le/Longitude	
Odlogory		Start		End			
Itom	ltem Encroachments			38.8576	25°	38.857625 °	
item				-121.782832 °		-121.782832 °	
DWR ID	DWR_RD1500_01_s _ 2012_28						
		Comn	nent Cod	de			
EQ : Equip	ment						
Inspector Comment							
Equipment are on the waterside shoulder but does not obstruct access.							



View of the equipment on the crown side of the levee looking upstream. Fall 2015.

LM Start	13.98	Rating **	A/W	Issue No.		89	
LM End	14.28	Issue Type +	Ma	Location *		WS	
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item		CE Erosion S	Survey,	38.857239°		38.861899°	
item	DRAFT			-121.783771 °		-121.784057 °	
DWR ID	DWR_RD1500_01_f _ 2018_89						
Comment Code							

## Inspector Comment

2017 Site ID: SAC 99.0 L

Status: Eroding

2017 Field Notes: Rock continues to unravel.

Site History: 1997 - Intermittent toe failure of the hand placed riprap;

failure of toe materials.

Photo 1 of 1: SP_2019_RD1500_189_89_20190304_00041.jpg
Pnoto 1 of 1 : SP_2019_RD1500_189_89_20190304_00041.jpg
HIGAGE 2012 Photo #4
USACE 2013 Photo #1

\_\_\_\_\_

LM Start	14.01	Rating **	М	Issue No.		157	
LM End	18.20	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Category	Calegory			Start		End	
Itom	ltem Vegetation			38.8580	94°	38.899569	0
Item				-121.7834	26°	-121.802221	0
DWR ID	DWR_RD1	500_01_s _ 201	9_157				
Comment Code							
1							

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## **Levee Inspection Report By Mile - Spring 2019**

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	14.04	Rating **	М	Issue No.		32	
LM End	14.23	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Vegetatio	n		38.8585	36°	38.861108 °	
пеш				-121.7832	99°	-121.783476 °	
DWR ID	DWR_RD1500_01_s _ 2019_32						
		Comn	nent Cod	le			
V1 : Contro	ol annual g	rass and wee	ds on th	e levee slo	pes a	and	
easements	3.						
Inspector Comment							

No Photos

		D :: **					
LM Start	14.19	Rating **	M	Issue No.	30		
LM End	14.19	Issue Type +	En	Location *	LS		
Earthen Levee				GPS La	atitud	le/Longitude	
Category				Start		End	
Encroachments			38.860624 °		38.860624°		
пеш				-121.783324 °		-121.783324°	
DWR ID	DWR_RD1	500_01_s _ 201	2_30				
Comment Code							
BU : Building							
Inspector Comment							

Concrete stemwall into levee embankement.



View of the building on the landward side of the levee looking upstream. Fall 2015.

LM Start	14.21	Rating **	М	Issue No.		138		
LM End	14.21	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	ments		38.8609	51 °	38.860951 °		
пеш				-121.783422 °		-121.783422 °		
DWR ID	DWR ID DWR_RD1500_01_f _ 2016_138							
		Comn	nent Cod	de				
BU : Buildi	ng							
Inspector Comment								



View of a building encroaching the levee on landside toe. Fall 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## **Levee Inspection Report By Mile - Spring 2019**

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	14.24	Rating **	М	Issue No.		31	
LM End	14.28	Issue Type +	En	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Vegetation					38.861913 °	
пеш				-121.783605° -121.78			
DWR ID	DWR ID DWR_RD1500_01_s _ 2012_31						
		Comn	nent Cod	le			
V6 : Lands	caping						
		Inspecto	or Comm	nent			



View of the landscaping on the landward side of the levee looking upstream. Spring 2016.

LM Start	14.30	Rating **	М	Issue No.		158	
LM End	16.23	Issue Type +	Ma	Location *	LS		
Category	GPS L	atitud	le/Longitude				
Category				Start		End	
Item	Vegetation			38.8622	211°	38.875019	
Item				-121.7837	-121.811659		
DWR ID DWR_RD1500_01_s _ 2019_158							
		Comn	nent Cod	de			
	V1 : Control annual grass and weeds on the levee slopes and easements.						
		Inspecto	or Comm	nent			

No Photos

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	14.71	Rating **	М	Issue No.	969		
LM End	15.76	Issue Type +	En	Location *	LS		
Category	GPS Latitude/Longitude						
Calegory	egory					End	
Item	Encroachments			38.86539		38.871827	
пеш			-121.789402 °		-121.804158		
DWR ID	DWR_RD1	500_01_s _ 201	2_969				
		Comn	nent Coo	le			
DT : Ditch							
	Inspector Comment						

Photo 1 of 1: SP\_2019\_RD1500\_189\_969\_20190304\_00083.jpg

View of the ditch on the landward side of the levee looking upstream. Fall 2015.

LM Start	15.11	Rating **	М	Issue No.		2573	
LM End	15.11	Issue Type +	En	Location *			
Supplemental				GPS Latitude/Longitude			
Category	legory					End	
Item	DWR UCIP Field Study			38.8668	41 °	38.866841 °	
пеш				-121.7940	47 °	-121.794047°	
DWR ID	20010						
Comment Code							

## Inspector Comment

FS\_ID:28486 DS\_ID:20010 EP\_NO: 10037

Repair Type: Non-Urgent Crossing Status: Found

There is a ditch at the levee toe.

UCIP Comments: Water treatment plant on landside.Working during field visit.Not found- Flap Gate in 6.5 foot by 7.0 foot O.D. concrete distribution box at landward toe.

FIELD\_STRUCT\_DESC: 22-inch concrete encased steel irrigation discharge pipe through the levee, 17.5 feet below the crown. One concrete cutoff wall. 1.5-inch conduit through the levee, 6 feet below the crown. Slant pump on the riverbank. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Flap gate in a 6.5-foot by 7-foot, outside dimensions, concrete distribution box at the landside (LS) toe. Meter pole and sparkling water meter in a 22-inch steel riser at the LS toe. (22-inch concrete encased steel irrigation discharge pipe through the levee, slant pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10037, 1974 - John Clauss). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 128, March 1960, (HLM 15.26), 18-inch pipe referenced].

#### Photo 1 of 3 : LICIP SP 2019 28486 52461 ind



WS view: CMP riser with gate valve and slant pump on steel platform.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	15.11	Rating **	М	Issue No.	2	2573 (cont)	
LM End	15.11	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory	ory			Start		End	
Item	DWR UC	IP Field Study		38.86684	۱1°	38.866841 °	
пеш				-121.79404	۱7°	-121.794047 °	
DWR ID	20010					·	

#### Comment Code

#### Inspector Comment

FS\_ID:28486 DS\_ID:20010 EP\_NO: 10037

Repair Type: Non-Urgent Crossing Status: Found

15.11

LM End

UCIP Comments: Water treatment plant on landside.Working during field visit.Not found- Flap Gate in 6.5 foot by 7.0 foot O.D. concrete distribution box at landward toe.

FIELD\_STRUCT\_DESC: 22-inch concrete encased steel irrigation discharge pipe through the levee, 17.5 feet below the crown. One concrete cutoff wall. 1.5-inch conduit through the levee, 6 feet below the crown. Slant pump on the riverbank. Slide gate in a 60-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Flap gate in a 6.5-foot by 7-foot, outside dimensions, concrete distribution box at the landside (LS) toe. Meter pole and sparkling water meter in a 22-inch steel riser at the LS toe. (22-inch concrete encased steel irrigation discharge pipe through the levee, slant pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10037, 1974 - John Clauss). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 128, March 1960, (HLM 15.26), 18-inch pipe referenced].

LM Start 15.11 Rating \*\* M Issue No. 2573 (cont)

En

Issue Type +

Location '

## Photo 2 of 3: UCIP\_SP\_2019\_28486\_52460.jpg



WS view: oil leaking slant pump on steel platform.

#### Photo 3 of 3: UCIP\_SP\_2019\_28486\_52459.jpg



LS view: concrete distribution box on levee toe. Water filtration plant off the levee toe.

Location Rating Issue Type LS : Land Side Ma : Maintenance Deficiency N/A: Not Applicable N: Not Inspected/Rated A : Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected En: Enforcement CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	16.30	Rating **	М	Issue No.		33				
LM End	16.30	Issue Type +	En	Location *		LS				
Category	Catagonia Earthen Levee			GPS La	atitud	le/Longitude				
Category				Start		End				
Item	Vegetatio	n		38.8757	85 °	38.875785 °				
item		-121.812330 ° -121.812								
DWR ID DWR_RD1500_01_f _ 2017_33										
		Comn	nent Cod	le						
V6 : Lands	caping									
		Inspecto	or Comm	nent						

No Photos

LM Start	16.31	Rating **	М	Issue No.		156	
LM End	18.20	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS La	atitud	le/Longitude	
Category	egory					End	
Item	Vegetatio	/egetation			89°	38.899570	٥
пеш				-121.812475 °		-121.802221	٥
DWR ID	DWR_RD1	500_01_s _ 201	9_156				
		Comn	nent Cod	le			
V1 : Contro	ol annual g	grass and wee	ds on th	e levee slo	pes	and	_
easements.							
	Inspector Comment						

No Photos

\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

CR: Crown

\* Rating

A : Acceptable

M : Minimally Acceptable

U : Unacceptable

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	16.97	Rating **	М	Issue No.		2574
LM End	16.97	Issue Type +	En	Location *		
Category				GPS Lati	tud	e/Longitude
Calegory						End
Item	DWR UC	IP Field Study		38.885098	3°	38.885098
пеш				-121.812884	۱°	-121.812884
DWR ID	20081					

#### Comment Code

#### Inspector Comment

FS\_ID:28489 DS\_ID:20081 EP\_NO: 8510

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe not visible on river bank.Cleaning and clearing

require around slide gates. May be abandoned.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal irrigation discharge pipe through the levee, 15 feet below the crown. Slide gate in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Slide gate on a concrete U-shaped headwall and irrigation ditch at the landside (LS) toe. (24-inch corrugated metal irrigation discharge pipe through the levee retained under Permit No. 8510, 1972 - John Clauss Jr. et al.). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 128, March 1960, (HLM 17.14)].

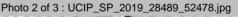
FS Date: 1/14/2014

LM Start	16.97	Rating **	М	Issue No.	2574 (cont)
LM End	16.97	Issue Type +	En	Location *	

#### Photo 1 of 3: UCIP\_SP\_2019\_28489\_52479.jpg



WS view: CMP riser with slide gate on levee slope.





WS view: cleaning and clearing requre around slide gate in CMP riser.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	16.97	Rating **	М	Issue No.	2574 (cont)	
LM End	16.97	Issue Type +	En	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	IP Field Study		38.88509	B°	38.885098 °
пеш				-121.81288	4 °	-121.812884 °
DWR ID	20081					

#### Comment Code

#### Inspector Comment

FS\_ID:28489 DS\_ID:20081 EP\_NO: 8510

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe not visible on river bank.Cleaning and clearing

require around slide gates. May be abandoned.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal irrigation discharge pipe through the levee, 15 feet below the crown. Slide gate in a 36-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Slide gate on a concrete U-shaped headwall and irrigation ditch at the landside (LS) toe. (24-inch corrugated metal irrigation discharge pipe through the levee retained under Permit No. 8510, 1972 - John Clauss Jr. et al.). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 128, March 1960, (HLM 17.14)].

FS Date: 1/14/2014



LS view: U type concrete headwall with slide gate on levee toe.

LM Start	17.27	Rating **	М	Issue No.		Issue No.		Issue No.		117
LM End	17.27	Issue Type +	En	Location *		LS				
Category Earthen Levee				GPS La	atitud	e/Longitude				
Category				Start		End				
Item	Encroach	ments		38.8873	77°	38.887377°				
item			-121.8082	36°	-121.808236 °					
DWR ID	DWR_RD1	500_01_f _ 201	6_117							

#### Comment Code

ST : Stairway

#### Inspector Comment

Stairway was made by digging into the levee slope.

Photo 1 of 1: SP\_2019\_RD1500\_189\_117\_20190304\_00059.jpg



View of stairs dug on landside levee slope. Fall 2016.

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	17.27	Rating **	М	Issue No.		2575
LM End	17.27	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UC	IP Field Study		38.8873	77°	38.887377°
пеш			-121.8082	19°	-121.808219 °	
DWR ID	20066					

### Comment Code

#### Inspector Comment

FS ID:28490 DS\_ID:20066 EP NO: 1739

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Most of the pipe exposed on levee slope.Pipe leakage repaired recently. Siphon breaker requires protection. FIELD\_STRUCT\_DESC: 20-inch welded steel irrigation discharge pipe through the levee, 5.5 feet below the crown. Slant pump mounted on a steel structure on the waterside (WS). Siphon breaker on the landside (LS) slope. Pipe discharges into a 6-foot by 5.5-foot, outside dimensions, concrete distribution box and irrigation ditch at the LS toe. Fish screen added in 2011. (Installation of a slant pump and a discharge pipe through the levee authorized under Permit No. 1739, 1953 - John Clauss. Installation of a fish screen authorized under Permit No. 18678, [permit missing], [RM 102.50]). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 17.45)]. FS Date: 1/14/2014

Rating \*\* LM Start 17.27 Issue No. 2575 (cont) 17.27 Issue Type + En Location \* LM End

# Photo 1 of 3: UCIP\_SP\_2019\_28490\_52485.jpg



WS view: slant pump on steel platform on levee berm.

#### Photo 2 of 3: UCIP\_SP\_2019\_28490\_52484.jpg



LS view: siphon breaker (bottom) without protection, exposed pipe on levee slope, and distribution box on levee toe.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	17.27	Rating **	М	Issue No.	2	2575 (cont)	
LM End	17.27	Issue Type +	En	Location *			
Category Supplemental				GPS Latitude/Longitude			
Calegory	Calegory			Start		End	
Item	DWR UCIP Field Study			38.8873	77 °	38.887377°	
item			-121.8082	19°	-121.808219 °		
DWR ID	20066						

#### Comment Code

#### Inspector Comment

FS\_ID:28490 DS\_ID:20066 EP\_NO: 1739

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Most of the pipe exposed on levee slope.Pipe leakage repaired recently.Siphon breaker requires protection. FIELD\_STRUCT\_DESC: 20-inch welded steel irrigation discharge pipe through the levee, 5.5 feet below the crown. Slant pump mounted on a steel structure on the waterside (WS). Siphon breaker on the landside (LS) slope. Pipe discharges into a 6-foot by 5.5-foot, outside dimensions, concrete distribution box and irrigation ditch at the LS toe. Fish screen added in 2011. (Installation of a slant pump and a discharge pipe through the levee authorized under Permit No. 1739, 1953 - John Clauss. Installation of a fish screen authorized under Permit No. 18678, [permit missing], [RM 102.50]). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M

Manual 128, March 1960, (HLM 17.45)].

FS Date: 1/14/2014



LS view: exposed pipe on levee slope, and concrete distribution box on levee toe.

LM Start	17.34	Rating **	М	Issue No.		121
LM End	17.34	Issue Type +	En	Location *		WS
Catagony	Earthen Levee			GPS Latitude/Longitude		
Calegory	Category				Start E	
Item	Encroach	Encroachments			37°	38.888137°
item			-121.8072	73 °	-121.807273°	
DWR ID	DWR_RD1	500_01_f _ 201	5_121			·

Comment Code

#### PI: Pipe

#### Inspector Comment

Pipe is causing the erosion on the berm of the levee.

#### Photo 1 of 3: SP\_2019\_RD1500\_189\_121\_20190304\_00064.jpg



Perspective view of the pump on the waterward side of the levee looking upstream. Fall 2015.

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	17.34	Rating **	М	Issue No.		121 (cont)		
LM End	17.34	Issue Type +	En	Location *		WS		
Earthen Levee				GPS La	GPS Latitude/Longitude			
Category				Start		End		
Item	Encroach	ments		38.8881	37°	38.888137 °		
пеш				-121.807273 °		-121.807273 °		
DWR ID DWR_RD1500_01_f _ 2015_121								
Comment Code								
PI : Pipe								
Inspector Comment								
Pipe is causing the erosion on the berm of the levee.								

Photo 2 of 3 : SP_2019_RD1500_189_121_20190304_00065.jpg
10/21/2015

There is erosion underneath the pipe on the waterward berm area. Fall 2015.

 LM Start
 17.34
 Rating \*\*
 M
 Issue No.
 121 (cont)

 LM End
 17.34
 Issue Type +
 En
 Location \*
 WS

Photo 3 of 3: SP\_2019\_RD1500\_189\_121\_20190304\_00066.jpg



The concrete for the base stand has been exposed due to erosion.

LM Start	18.27	Rating **	М	Issue No.		154		
LM End	19.48	Issue Type +	Ма	Location *		WS		
Category	evee	GPS La	GPS Latitude/Longitude					
Category				Start		End		
Item	Vegetatio	n		38.9004	96°	38.906980°		
Item				-121.8026	40°	-121.793140°		
DWR ID DWR_RD1500_01_s _ 2019_154								
	Comment Code							
V1 : Contro easements		rass and wee	ds on th	e levee slo <sub>l</sub>	pes a	and		
		Inspecto	or Comm	nent				

No Photos

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	18.30	Rating **	М	Issue No.		155		
LM End	18.96	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Calegory				Start		End		
Item	Vegetation			38.9009	22 °	38.901400 °		
Item			-121.8026	56°	-121.791410 °			
DWR ID DWR_RD1500_01_s _ 2019_155								
		Comn	nent Coo	le				
V1 : Contro easements		grass and wee	ds on th	e levee slop	oes a	and		
Inspector Comment								

No Photos

LM Start	18.38	Rating **	A/W	Issue No.		80			
LM End	19.06	Issue Type +	Ma	Location *		WS			
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item		2017 USACE Erosion Survey,			37°	38.902721 °			
пеш	DRAFT			-121.8011	75 °	-121.790677°			
DWR ID	DWR_RD1	500_01_f _ 201	8_80						

#### Comment Code

#### Inspector Comment

2017 Site ID: SAC 104.0 L

Status: Eroding

2017 Field Notes: Bank slope is relatively stable.

Site History: 1997 - Pocket failures of cobble revetment toe; scallops of rock loss along the bank; irregular bankline developing. 2001 - Small scallops in the toe of the berm. 2005 - Still multiple erosion pockets in the toe. 2006 - Two new small slumps. 2011 - Old cobble continue to fail causing minor slumping. 2012 - Portions of site appears to be stabilizing. 2016- Cobble revetment continues to fail.

## Photo 1 of 1 : SP\_2019\_RD1500\_189\_80\_20190304\_00031.jpg



USACE 2013 Photo #1

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	18.40	Rating **	М	Issue No.		2576	
LM End	18.40	Issue Type +	En	Location *			
Category				GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UC	IP Field Study		38.90088	5 °	38.900885 °	
пеш				-121.80099	9°	-121.800999 °	
DWR ID	20068						

#### Comment Code

#### Inspector Comment

FS\_ID:28505 DS\_ID:20068 EP NO: 2425

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Concrete pad on both sides of the levee

shoulders.Oil leaks from pump set.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation discharge pipe through the levee, 3 feet below the crown. Two concrete cutoff walls. Slant pump in a corrugated metal pump house on a steel structure on the bank. Meter pole on the slope. Water meter installed on the pipe on the waterside (WS) slope. Siphon breaker on the landside (LS) shoulder. Pipe discharges into a 36-inch, inside diameter, concrete standpipe at the LS toe. (Installation of a pumping plant and discharge pipe authorized under Permit No. 2425, 1956 - Glenn J. Hiatt, [RM 103.66]). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 18.60)].

FS Date: 1/14/2014

LM Start	18.40	Rating **	М	Issue No.	2576 (cont)
LM End	18.40	Issue Type +	En	Location *	

# Photo 1 of 3: UCIP\_SP\_2019\_28505\_52517.jpg



WS view: slant pump in CM shed on levee berm. Oil leaks from the pump.

#### Photo 2 of 3: UCIP\_SP\_2019\_28505\_52516.jpg



LS view: siphon breaker (bottom) on exposed steel pipe on levee slope and steel stand pipe (top) on levee toe.

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	18.40	Rating **	М	Issue No.	2	2576 (cont)
LM End	18.40	Issue Type +	En	Location *		
Category	Suppleme	GPS Latitude/Longitude				
Calegory						End
Item	DWR UC	IP Field Study		38.90088	5 °	38.900885 °
пеш			-121.80099	9°	-121.800999°	
DWR ID	20068					

#### Comment Code

#### Inspector Comment

FS\_ID:28505 DS\_ID:20068 EP\_NO: 2425

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Concrete pad on both sides of the levee

shoulders.Oil leaks from pump set.

FIELD\_STRUCT\_DESC: 14-inch steel irrigation discharge pipe through the levee, 3 feet below the crown. Two concrete cutoff walls. Slant pump in a corrugated metal pump house on a steel structure on the bank. Meter pole on the slope. Water meter installed on the pipe on the waterside (WS) slope. Siphon breaker on the landside (LS) shoulder. Pipe discharges into a 36-inch, inside diameter, concrete standpipe at the LS toe. (Installation of a pumping plant and discharge pipe authorized under Permit No. 2425, 1956 - Glenn J. Hiatt, [RM 103.66]). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 18.60)].

FS Date: 1/14/2014

# Photo 3 of 3: UCIP\_SP\_2019\_28505\_52515.jpg

LS view: siphon breaker (left) on exposed steel pipe on levee slope.

Concrete pad (right) on levee shoulder.

LM Start	18.98	Rating **	М	Issue No.		36	
LM End	18.98	Issue Type +	En	Location *	LS		
Category	Earthen L	GPS La	titud	le/Longitude			
Calegory						End	
Item	Encroach	Encroachments			70°	38.901570°	
пеш	item				35 °	-121.791235 °	
DWR ID	DWR RD1	500 01 s 201	2 36				

#### Comment Code

BU: Building

#### Inspector Comment

Building and concrete retaining wall are located at the toe of landside levee. The retaining wall is permitted (Permit #10065) but the building is not.

#### Photo 1 of 1: SP\_2019\_RD1500\_189\_36\_20190304\_00017.jpg



View of the building on the landward side of the levee looking upstream. Fall 2015.

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	18.98	Rating **	М	Issue No.		37		
LM End	19.04	Issue Type +	En	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
				Start		End		
Item	Vegetatio	Vegetation			59°	38.902383 °		
item				-121.7912	64 °	-121.790574°		
DWR ID DWR_RD1500_01_s _ 2012_37								
0 10 1								

Comment Code

V6 : Landscaping

#### Inspector Comment

The groundcover is on the levee slope above the concrete retaining wall. The groundcover is irrigated.

LM Start	18.98	Rating **	М	Issue No.	37 (cont)
LM End	19.04	Issue Type +	En	Location *	LS



View of the groundcover on the levee slope above the concrete retaining wall

Photo 2 of 2: SP\_2019\_RD1500\_189\_37\_20190304\_00019.jpg



View of the groundcover on the landward side of the levee looking upstream. Fall 2015.

LM Start	19.06	Rating **	М	Issue No.		153	
LM End	19.16	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Category	gory			Start		End	
Item	Vegetatio	egetation/			40°	38.903964	0
item				-121.7904	31 °	-121.789985	0
DWR ID	DWR_RD1	500_01_s _ 201	9_153				
		Comn	nent Cod	le			
V1 : Contro easements	•	grass and wee	ds on th	e levee slo	pes	and	
		Inspecto	or Comm	nent			

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	19.16	Rating **	A/W	Issue No.		81	
LM End	19.47	Issue Type +	Ма	Location *	WS		
Category Supplemental				GPS Latitude/Longitude			
Calegory			Start		End		
Item		ACE Erosion S	Survey,	38.9040	41 °	38.906697 °	
пеш	DRAFT			-121.7902	98 °	-121.792796°	
DWR ID DWR_RD1500_01_f _ 2018_81							
Comment Code							

#### Inspector Comment

2017 Site ID: SAC 104.5 L

Status: Eroding

2017 Field Notes: Site appears stable.

Site History: 1997 - Cobbles eroded off the clay materials; not much evidence of erosion on the toe; cobble loss on the toe. 2011 - Some minor new erosion.



USACE 2013 Photo #1

LM Start	19.23	Rating **	М	Issue No.		2577
LM End	19.23	Issue Type +	En	Location *		
Category	Suppleme	GPS La	atitud	le/Longitude		
Calegory	egory					End
Item	DWR UC	IP Field Study		38.9050	29°	38.905029
item				-121.790076° -		-121.790076
DWR ID	20087					

#### Comment Code

#### Inspector Comment

FS\_ID:28506 DS\_ID:20087 EP\_NO: 550

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Surface erosion on landside slope.Oil leaks from

the pump.

FIELD\_STRUCT\_DESC: 14-inch coated steel irrigation discharge pipe through the levee, 4.8 feet below the crown. Two concrete cutoff walls. Slant pump and gate valve in a corrugated metal pump house on a steel structure on the berm. Water meter installed on the pipe on the waterside (WS) slope. Screw gate at the landside (LS) end. Concrete distribution box on the LS. (Installation of a pump and a 14-inch steel discharge pipe through the levee authorized under Permit No. 550, 1931 - P. J. Hiatt. Replacement of a failing 14-inch pipe with the same size pipe through the levee authorized under Permit No. 17648, 2003 - Van Ruiten Brothers). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 19.44)]. FS Date: 1/14/2014

#### Photo 1 of 3: UCIP\_SP\_2019\_28506\_52523.jpg



WS view: slant pump in CM shed on levee berm. Oil leaks from the pump.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	19.23	Rating **	М	Issue No.	2	2577 (cont)
LM End	19.23	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study	Field Study		9°	38.905029 °
пеш				-121.79007	6°	-121.790076 °
DWR ID	20087					

#### Comment Code

#### Inspector Comment

FS\_ID:28506 DS\_ID:20087 EP\_NO: 550

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Surface erosion on landside slope.Oil leaks from

the pump.

FIELD\_STRUCT\_DESC: 14-inch coated steel irrigation discharge pipe through the levee, 4.8 feet below the crown. Two concrete cutoff walls. Slant pump and gate valve in a corrugated metal pump house on a steel structure on the berm. Water meter installed on the pipe on the waterside (WS) slope. Screw gate at the landside (LS) end. Concrete distribution box on the LS. (Installation of a pump and a 14-inch steel discharge pipe through the levee authorized under Permit No. 550, 1931 - P. J. Hiatt. Replacement of a failing 14-inch pipe with the same size pipe through the levee authorized under Permit No. 17648, 2003 - Van Ruiten Brothers). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 19.44)].

LM Start	19.23	Rating **	М	Issue No.	2577 (cont)
LM End	19.23	Issue Type +	En	Location *	

#### Photo 2 of 3: UCIP\_SP\_2019\_28506\_52522.jpg



LS view: surface erosion on landside levee slope.

#### Photo 3 of 3: UCIP\_SP\_2019\_28506\_52521.jpg



LS view: concrete distribution box on levee toe.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	19.43	Rating **	С	Issue No.		111	
LM End	19.43	Issue Type +	En	Location *		LS	
Category	Earthen Levee				atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		38.9071	35 °	38.907135 °	
пеш				-121.792303 °		-121.792303 °	
DWR ID DWR_RD1500_01_f _ 2018_111							
		Comn	nent Cod	le			
PR : Pruni	ngs						
Inspector Comment							
Pruning pile at the landside toe.							

No Photos

LM Start	19.47	Rating **	М	Issue No.		2578
LM End	19.47	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory			GPS Latitud	End		
Item	DWR UC	IP Field Study		38.90703	3°	38.907033 °
пеш				-121.79294	3°	-121.792943 °
DWR ID	20004					

#### Comment Code

#### Inspector Comment

FS\_ID:28524 DS\_ID:20004 EP\_NO: 15681

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Obstructed siphon breakers on landside.Two 3-inch conduit through the levee.Service box on pump platform.Pumping plant was working during the field visit.

FIELD\_STRUCT\_DESC: 1 of 2: 16-inch steel irrigation discharge pipe, asphalt coated inside and out and wrapped with asphalt saturated felt, through the levee, 1.5 feet below the crown. Cutoff wall at the centerline of the levee. Two slant pumps supported by a steel piling structure on the riverbank. Steel walkway to the pump platform. Siphon breakers in steel pipe risers on the landside (LS) shoulder. Pipe discharges into a concrete discharge box off the LS toe. (Installation of a discharge pipe through the levee and a slant pump on the riverbank authorized under Permit No. 15681, 1991 - Blackfraires Investment).

FS Date: 1/14/2014



WS view: pipe, walkway, slant pump, and steel platform on levee berm.

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	19.47	Rating **	М	Issue No.	2578 (cont)		
LM End	19.47	Issue Type +	En	Location *			
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.90703	33°	38.907033 °	
пеш				-121.79294	43 °	-121.792943 °	
DWR ID	20004						
Comment Code							

#### Inspector Comment

FS ID:28524 DS\_ID:20004 EP NO: 15681

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Obstructed siphon breakers on landside. Two 3-inch conduit through the levee.Service box on pump platform.Pumping plant was working during the field visit.

FIELD\_STRUCT\_DESC: 1 of 2: 16-inch steel irrigation discharge pipe, asphalt coated inside and out and wrapped with asphalt saturated felt, through the levee, 1.5 feet below the crown. Cutoff wall at the centerline of the levee. Two slant pumps supported by a steel piling structure on the riverbank. Steel walkway to the pump platform. Siphon breakers in steel pipe risers on the landside (LS) shoulder. Pipe discharges into a concrete discharge box off the LS toe. (Installation of a discharge pipe through the levee and a slant pump on the riverbank authorized under Permit No. 15681, 1991 - Blackfraires Investment).

FS Date: 1/14/2014

LM Start	19.47	Rating **	М	Issue No.	2578 (cont)
LM End	19.47	Issue Type +	En	Location *	

#### Photo 2 of 3: UCIP\_SP\_2019\_28524\_52550.jpg



LS view: siphon breakers in steel pipe risers (bottom) on levee slope and concrete distribution (top) box on levee toe.

#### Photo 3 of 3: UCIP\_SP\_2019\_28524\_52549.jpg



LS view: concrete distribution box on levee toe.

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	19.47	Rating **	М	Issue No.		2579
LM End	19.47	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory	gory		Start		End	
Item	DWR UCI	P Field Study	38.9070	28°	38.907028 °	
пеш		-		-121.7929	59°	-121.792959 °
DWR ID	20022					

#### Comment Code

#### Inspector Comment

FS ID:28927 DS\_ID:20022 EP NO: 15681

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Obstructed siphon breakers on landside. Two 3-inch conduit through the levee.Service box on pump platform.Pumping plant was working during the field visit.

FIELD\_STRUCT\_DESC: 2 of 2: 20-inch steel irrigation discharge pipe, asphalt coated inside and out and wrapped with asphalt saturated felt, through the levee, 1.5 feet below the crown. Cutoff wall at the centerline of the levee. Two slant pumps supported by a steel piling structure on the riverbank. Steel walkway to the pump platform. Siphon breakers in steel pipe risers on the landside (LS) shoulder. Pipe discharges into a concrete discharge box off the LS toe. (Installation of a discharge pipe through the levee and a slant pump on the riverbank authorized under Permit No. 15681, 1991 - Blackfraires Investment).

FS Date: 1/14/2014

LM Start	19.47	Rating **	М	Issue No.	2579 (cont)
LM End	19.47	Issue Type +	En	Location *	



WS view: pipe, walkway, slant pump, and steel platform on levee berm.

#### Photo 2 of 3: UCIP\_SP\_2019\_28927\_53215.jpg



LS view: siphon breakers in steel pipe risers (bottom) on levee slope and concrete distribution (top) box on levee toe.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain Issue Type

Ma: Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	19.47	<b>19.47</b> Rating ** M		Issue No.	2	2579 (cont)
LM End	19.47	Issue Type +	En	Location *		
Category	Supplemental				GPS Latitude/Longitude	
Calegory						End
Item	DWR UC	IP Field Study		38.90702	8 °	38.907028 °
пеш				-121.79295	9°	-121.792959 °
DWR ID	DWR ID 20022					

#### Comment Code

#### Inspector Comment

FS ID:28927 DS\_ID:20022 EP NO: 15681

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Obstructed siphon breakers on landside. Two 3-inch conduit through the levee.Service box on pump platform.Pumping plant was working during the field visit.

FIELD\_STRUCT\_DESC: 2 of 2: 20-inch steel irrigation discharge pipe, asphalt coated inside and out and wrapped with asphalt saturated felt, through the levee, 1.5 feet below the crown. Cutoff wall at the centerline of the levee. Two slant pumps supported by a steel piling structure on the riverbank. Steel walkway to the pump platform. Siphon breakers in steel pipe risers on the landside (LS) shoulder. Pipe discharges into a concrete discharge box off the LS toe. (Installation of a discharge pipe through the levee and a slant pump on the riverbank authorized under Permit No. 15681, 1991 - Blackfraires Investment).

FS Date: 1/14/2014

# Photo 3 of 3: UCIP\_SP\_2019\_28927\_53214.jpg

LS view: concrete distribution box on levee toe.

LM Start	19.56	9.56 Rating ** M		Issue No.		2549
LM End	19.56	Issue Type +	En	Location *	WS	
Category	Earthen L	evee	GPS Latitude/Longitude			
Calegory			Start		End	
Item	Encroach		38.9065	65 °	38.906565°	
пеш				-121.7944	72 °	-121.794472 °
DWR ID	DWR_RD1	DWR_RD1500_01_s _ 2015_2549				
Comment Code						
EQ : Equipment						

Inspector Comment

Photo 1 of 1: SP\_2019\_RD1500\_189\_2549\_20190304\_00087.jpg



View of the equipment on the waterward side of the levee looking upstream. Spring 2015.

Rating A: Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated

C: Corrected A/W : Acceptable but Monitor & Maintain Issue Type

Ma : Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	20.22	Rating **	М	Issue No.		150	
LM End	24.31	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory		Start		End			
Item	Vegetatio	n		38.9074	44 °	38.938310°	
Item				-121.8064	54°	-121.829347 °	
DWR ID	DWR_RD1	500_01_s _ 201	9_150				
		Comn	nent Coo	le			
V1 : Contro	ol annual g	rass and wee	ds on th	e levee slo	oes a	and	
easements	S.						
	Inspector Comment						

No Photos

LM Start	20.22	<b>20.22</b> Rating ** M		Issue No.	ssue No. 147		
LM End	25.75	Issue Type +	Ma	Location *		WS	
Category	GPS Latitude/Longitude						
Calegory		Start		End			
Item	Vegetatio	n		38.9074	44 °	38.956093	0
пеш			-121.8064	54°	-121.836454	0	
DWR ID							
	Commont Code						

Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

LM Start	20.97	Rating **	М	Issue No.	123		_
LM End	21.15	Issue Type +	En	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Encroachments			38.9108	85°	38.913199	0
пеш				-121.804603 °		-121.803256	0
DWR ID	DWR_RD1	500_01_s _ 201	8_123				
		Comn	nent Cod	le			
DT : Ditch	Ditch						
Inspector Comment							

Photo 1 of 1: SP\_2019\_RD1500\_189\_123\_20190304\_00067.jpg



View of ditch at the landside toe. Spring 2018.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	21.01	М	Issue No.		105	
LM End	21.01	Issue Type +	Ма	Location *		LS
Category	Catagoria Earthen Levee			GPS Latitude/Longitude		
Calegory				Start		End
Item	Animal Co	Animal Control			22 °	38.911322 °
пеш				-121.8040	78 °	-121.804078 °
DWR ID	DWR ID DWR_RD1500_01_f _ 2018_105					

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Rodent holes are on the landside slope.

No Photos



View of rodent holes on the landside slope. Fall 2018.

No Photos

LM Start	21.10	Rating **	М	Issue No.		103	
LM End	21.10	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee				GPS Latitude/Longitude		
Calegory						End	
Item	Animal Co	Animal Control			11°	38.912511 °	
пеш				-121.8033	55 °	-121.803355 °	
DW/P ID	DWD DD1	500 01 c 201	0 102				

DWR ID DWR\_RD1500\_01\_s \_ 2019\_103

#### Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Rodent holes are at the landside toe.

LM Start	21.15	Rating **	M	Issue No.		151	
LM End	21.15	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee				GPS Latitude/Longitude		
Calegory						End	
Item	Animal Co	Animal Control			40°	38.913240	٥
пеш				-121.8032	45 °	-121.803245	٥
DWR ID	DWR_RD1	DWR_RD1500_01_s _ 2019_151					

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Rodent holes are on the landside slope and shoulder.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	21.26	Rating **	М	Issue No.		2580			
LM End	21.26	Issue Type +	En	Location *					
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UC	WR UCIP Field Study		38.91465	9°	38.914659 °			
пеш				-121.80360	e e	-121.803609 °			
DWR ID	20070								

#### Comment Code

#### Inspector Comment

FS\_ID:28527 DS\_ID:20070 EP NO: 11959A Repair Type: Non-Urgent

Crossing Status: Found

UCIP Comments: Siphon breaker (obstructed) in CMP on landside

slope. Power pole on landside toe.

FIELD\_STRUCT\_DESC: 10-inch coated and wrapped steel irrigation discharge pipe through the levee, 3 feet below the crown. Corrugated metal cutoff wall. Slant pump on a steel platform at the riverbank. Obstructed siphon breaker in a corrugated metal pipe (CMP) riser on the landside (LS) slope. Pipe discharges into a 6-foot by 6-foot concrete distribution box on the LS. (Replacement of an existing 10-inch steel pipe with a new 10-inch steel pipe through the levee authorized under Permit No. 11959-A, 1977 - George Van Ruiten Jr.). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 21.50)].

FS Date: 1/14/2014

LM Start	21.26	Rating **	М	Issue No.	2580 (cont)
LM End	21.26	Issue Type +	En	Location *	



WS view: slant pump on steel platform on levee berm.

#### Photo 2 of 3: UCIP\_SP\_2019\_28527\_52567.jpg



LS view: siphon breaker in CMP riser on levee slope (bottom) and concrete distribution box (top) on levee toe.

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	21.26	Rating **	М	Issue No.	2	2580 (cont)		
LM End	21.26	Issue Type +	En	Location *				
Category Supplemental				GPS Latitude/Longitude				
Calegory						End		
Item	DWR UC	DWR UCIP Field Study		38.91465	9°	38.914659°		
пеш				-121.80360	9 °	-121.803609 °		
DWR ID	20070							

#### Comment Code

#### Inspector Comment

FS\_ID:28527 DS\_ID:20070 EP\_NO: 11959A Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Siphon breaker (obstructed) in CMP on landside

slope.Power pole on landside toe.

FIELD\_STRUCT\_DESC: 10-inch coated and wrapped steel irrigation discharge pipe through the levee, 3 feet below the crown. Corrugated metal cutoff wall. Slant pump on a steel platform at the riverbank. Obstructed siphon breaker in a corrugated metal pipe (CMP) riser on the landside (LS) slope. Pipe discharges into a 6-foot by 6-foot concrete distribution box on the LS. (Replacement of an existing 10-inch steel pipe with a new 10-inch steel pipe through the levee authorized under Permit No. 11959-A, 1977 - George Van Ruiten Jr.). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M

Manual 128, March 1960, (HLM 21.50)].

FS Date: 1/14/2014

Photo 3 of 3: UCIP_SP_2019_28527_52566.jpg

LS view: obstructed siphon breaker in CMP riser on levee slope.

LM Start	21.30	Rating **	М	Issue No.	140		
LM End	21.58	Issue Type +	En	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	y			Start		End	
Item	Encroach	Encroachments		38.91484	16°	38.916180	
пеш	item			-121.80369	92 °	-121.808850	
DWR ID	DWR_RD1	500_01_f _ 201	6_140				
Comment Code							

DT : Ditch

Inspector Comment

There is an old ditch at the landside toe.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	21.58	Rating **	М	Issue No.		120
LM End	21.58	Issue Type +	En	Location *		LS
Category Earthen Levee			GPS Latitude/Longitude			
Calegory			Start		End	
Item	Encroach	Encroachments			)7°	38.916207 °
пеш			-121.80889	93 °	-121.808893 °	
DWR ID DWR_RD1500_01_s _ 2018_120						
Comment Code						
PI · Pine						

PI : Pipe

#### Inspector Comment

There is erosion around landowner's PVC standpipe.



View of erosion around PVC standpipe. Spring 2018.

Photo 1 of 3: UCIP\_SP\_2019\_28528\_52576.jpg

LM Start	21.58	Rating **	М	Issue No.		2581		
LM End	21.58	Issue Type +	En	Location *				
Category	Supplemental			GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	DWR UC	DWR UCIP Field Study			80°	38.916180°		
пеш				-121.808904°		-121.808904°		
DWR ID	20071							

### Inspector Comment

Comment Code

FS\_ID:28528 DS\_ID:20071 EP\_NO: 10063

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Water leaks near pump. Obstructed siphon breaker in CMP on landside.Plant was working during field visit.

FIELD\_STRUCT\_DESC: 16-inch steel irrigation discharge pipe through the levee, 6.3 feet below the crown. Corrugated metal cutoff wall. 1.5-inch conduit through the levee, 6.5 feet below the crown. Slant pump and gate valve on riverbank. Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the landside (LS) slope. 5-foot by 5-foot concrete distribution box on the LS. CMP standpipe on the LS toe. Power pole and one anchor at the LS toe. (Automatic Board Order (ABO) issued as Permit No. 10063, 1974 - Thomas L. Nelson). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento

O&M Manual 128, March 1960, (HLM 21.83)]. FS Date: 1/14/2014

-121.000904



WS view: slant pump on steel platform on levee berm. Exposed steel pipe with gate valve also on levee berm.

Location \*\* Ra

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

Rating
A: Acceptable
M: Minimally Acceptable

U: Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	21.58	Rating **	М	Issue No.	2581 (cont)			
LM End	21.58	Issue Type +	En	Location *				
Category	Suppleme	ental	GPS Latitude/Longitude					
Calegory						End		
Item	DWR UC	IP Field Study		38.91618	0°	38.916180°		
пеш				-121.80890	4 °	-121.808904 °		
DWR ID 20071								
	Comment Code							

#### Inspector Comment

FS\_ID:28528 DS\_ID:20071 EP\_NO: 10063

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Water leaks near pump. Obstructed siphon breaker in CMP on landside Plant was working during field visit

in CMP on landside.Plant was working during field visit.
FIELD STRUCT DESC: 16-inch steel irrigation discharge

FIELD\_STRUCT\_DESC: 16-inch steel irrigation discharge pipe through the levee, 6.3 feet below the crown. Corrugated metal cutoff wall. 1.5-inch conduit through the levee, 6.5 feet below the crown. Slant pump and gate valve on riverbank. Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the landside (LS) slope. 5-foot by 5-foot concrete distribution box on the LS. CMP standpipe on the LS toe. Power pole and one anchor at the LS toe. (Automatic Board Order (ABO) issued as Permit No. 10063, 1974 - Thomas L. Nelson). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 21.83)].

FS Date: 1/14/2014

LM Start	21.58	Rating **	М	Issue No.	2581 (cont)
LM End	21.58	Issue Type +	En	Location *	

# Photo 2 of 3 : UCIP\_SP\_2019\_28528\_52575.jpg

WS view: leaky inlet pipe near pump platform.

#### Photo 3 of 3: UCIP\_SP\_2019\_28528\_52574.jpg



LS view: siphon breaker in CMP riser on levee slope (bottom) and CMP stand pipe (top) on levee toe.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type
Ma: Maintenance Deficiency

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	22.73	Rating **	М	Issue No.		2582	
LM End	22.73	Issue Type +	En	Location *			
Category	Suppleme	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.9197	17°	38.919717°	
пеш				-121.8291	13 °	-121.829113 °	
DWR ID	DWR ID 19995						

#### Comment Code

#### Inspector Comment

FS ID:28583 DS\_ID:19995 EP NO: 10851

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Exposed conduit on both slopes of the levee. Plant was working during field visit. Water was leaking from pipe joint near pump. Obstructed siphon breaker in CMP.

FIELD\_STRUCT\_DESC: [Pumping Plant No. 2] 14-inch steel irrigation discharge pipe through the levee, 6.2 feet below the crown. Corrugated metal cutoff wall. 2-inch conduit through the levee, 5 feet below the crown. Pump and gate valve on a steel platform at the riverbank. Switch panel on the berm. Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the landside (LS) shoulder. Pipe discharges into a 36inch CMP standpipe at the LS toe. Meter pole at the LS toe. (Installation of three centrifugal pumps authorized under Permit No. 2895, 1958 -George Van Ruiten). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 23.00), 14inch pipe referencedl.

FS Date: 1/14/2014

LM Start	22.73	Rating **	М	Issue No.	2582 (cont)
LM End	22.73	Issue Type +	En	Location *	



WS view: slant pump on steel platform on levee berm.

#### Photo 2 of 3: UCIP\_SP\_2019\_28583\_52626.jpg



WS view: gate valve beneath slant pipe on levee berm. Water leaking from this pipe (marked).

Rating : Acceptable Minimally Acceptable U: Unacceptable

N: Not Inspected/Rated C: Corrected

Issue Type

Ma : Maintenance Deficiency Ob: Design & System Obsolescence En: Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	22.73	Rating **	М	Issue No.	2	2582 (cont)
LM End	22.73	Issue Type +	En	Location *		
Category	Suppleme	olemental GPS Latitude/Longitud				e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study	,	38.9197	17°	38.919717°
item				-121.8291	13 °	-121.829113 °
DWR ID	19995					

#### Comment Code

#### Inspector Comment

FS\_ID:28583 DS\_ID:19995 EP\_NO: 10851

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Exposed conduit on both slopes of the levee. Plant was working during field visit. Water was leaking from pipe joint near pump. Obstructed siphon breaker in CMP.

FIELD\_STRUCT\_DESC: [Pumping Plant No. 2] 14-inch steel irrigation discharge pipe through the levee, 6.2 feet below the crown. Corrugated metal cutoff wall. 2-inch conduit through the levee, 5 feet below the crown. Pump and gate valve on a steel platform at the riverbank. Switch panel on the berm. Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the landside (LS) shoulder. Pipe discharges into a 36-inch CMP standpipe at the LS toe. Meter pole at the LS toe. (Installation of three centrifugal pumps authorized under Permit No. 2895, 1958 - George Van Ruiten). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 23.00), 14-

inch pipe referenced]. FS Date: 1/14/2014

#### Photo 3 of 3: UCIP\_SP\_2019\_28583\_52625.jpg



LS view: siphon breaker in CMP riser on levee slope (bottom) and CMP stand pipe (top) on levee toe.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	23.65	Rating **	U	Issue No.	2583		
LM End	23.65	Issue Type +	En	Location *			
Category	ental	GPS La	atitud	le/Longitude			
Calegory			Start		End		
Item	DWR UC	IP Field Study		38.9302	42 °	38.930242 °	
пеш				-121.8349	56°	-121.834956 °	
DWR ID 20072							
Comment Code							

#### Inspector Comment

FS\_ID:53023 DS\_ID:20072 EP\_NO: 2895 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/18/2018 WS levee slope was disturbed to perform pipe maintenance. Unable to locate a permit for this work. Crossing remains "Urgent" due to soil disturbance on WS levee slope. (O.Yakimov - DWR)Most of the pipe exposed on levee slopes.Leaky pump. Obstructed siphon breaker.Not found- Concrete headwall at landward toe.

FIELD\_STRUCT\_DESC: [Pumping Plant No. 1] 14-inch steel irrigation discharge pipe through the levee, 6.5 feet below the crown. Corrugated metal cutoff wall. 1.5-inch conduit through the levee, 4 feet below the crown. Slant pump and control panel on steel structure on the berm. Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the landside (LS) shoulder. 36-inch concrete standpipe at the LS toe. Concrete headwall at the LS toe. Meter pole at the LS toe. (Installation of three centrifugal pumps authorized under Permit No. 2895, 1958 - George Van Ruiten). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 23.92), 24-inch pipe referenced].

FS Date: 10/18/2018 8:01:23 AM

LM Start	23.65	Rating **	U	Issue No.	2583 (cont)
LM End	23.65	Issue Type +	En	Location *	



WS levee slope was excavated to do pipe maintenance, photo courtesy of Zach Jojola.

#### Photo 2 of 3: UCIP SP 2019 53023 78167.jpg



Levee crown view: WS levee slope was excavated to do pipe maintenance, photo courtesy of Zach Jojola.

Location Rating Issue Type Ma : Maintenance Deficiency LS: Land Side N/A: Not Applicable N: Not Inspected/Rated : Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected En: Enforcement CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	23.65	Rating **	U	Issue No.	2	2583 (cont)	
LM End	23.65	Issue Type +	En	Location *			
Category	Suppleme	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.9302	42 °	38.930242 °	
пеш				-121.8349	56 °	-121.834956 °	
DWR ID	R ID 20072						

#### Comment Code

#### Inspector Comment

FS\_ID:53023 DS\_ID:20072 EP NO: 2895 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 10/18/2018 WS levee slope was disturbed to perform pipe maintenance. Unable to locate a permit for this work. Crossing remains "Urgent" due to soil disturbance on WS levee slope. (O.Yakimov - DWR)Most of the pipe exposed on levee slopes.Leaky pump. Obstructed siphon breaker. Not found- Concrete headwall at landward toe.

FIELD\_STRUCT\_DESC: [Pumping Plant No. 1] 14-inch steel irrigation discharge pipe through the levee, 6.5 feet below the crown. Corrugated metal cutoff wall. 1.5-inch conduit through the levee, 4 feet below the crown. Slant pump and control panel on steel structure on the berm. Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the landside (LS) shoulder. 36-inch concrete standpipe at the LS toe. Concrete headwall at the LS toe. Meter pole at the LS toe. (Installation of three centrifugal pumps authorized under Permit No. 2895, 1958 -George Van Ruiten). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 23.92), 24inch pipe referenced].

FS Date: 10/18/2018 8:01:23 AM

# Photo 3 of 3: UCIP\_SP\_2019\_53023\_77546.jpg



WS view: Currently installing a new meter. Still needs backfill. Levee inspector: Zachary Jojola.

LM Start	23.66	Rating **	М	Issue No.		112
LM End	23.66	Issue Type +	En Location *		Location *	
Category	Earthen Levee			GPS La	tituc	le/Longitude
Calegory				Start		End
Item	Encroach	ments		38.93028	30°	38.930280 °
пеш			Start	57 °	-121.834957 °	
DWR ID	DWR_RD1	500_01_s _ 201	8_112			

Comment Code

#### ST: Stairway

#### Inspector Comment

Landowner has dug stairs into the levee adjacent to standpipe.

#### Photo 1 of 1: SP\_2019\_RD1500\_189\_112\_20190304\_00054.jpg



View of stairs on the landside slope. Fall 2018.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	23.71	Rating **	A/W	Issue No.		176		
LM End	23.71	Issue Type +	En	Location *		LS		
Cotogony	Earthen L	evee	evee			e/Longitude		
Category				Start		End		
Item	Encroach	ments		38.9310	)45 °	38.931045°		
item				-121.8347	'95 °	-121.834795 °		
DWR ID	DWR ID DWR_RD1500_01_s _ 2016_176							
Comment Code								
EQ : Equip	ment							
		Inspecto	or Comm	nent				



View of the pipes along the toe of the landward side of the levee looking upstream. Spring 2016.

LM Start	23.77	Rating **	М	Issue No.		42	
LM End	23.77	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Encroach	ments		38.9318	38°	38.931838°	
item				-121.8344	37°	-121.834437 °	
DWR ID	DWR_RD1	500_01_s _ 201	2_42	2			
		Comn	nent Cod	le			
EQ : Equip	ment						
		Inspecto	or Comm	nent			
Some equ	ipment is l	ocated at the	landside	toe.			



View of the barn and equipment on the landward side of the levee looking downstream. Fall 2015.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	24.17	Rating **	М	Issue No.		979
LM End	24.31	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS Lat	itud	le/Longitude
Calegory				Start		End
Item	Encroach	ments		Start 38.936419		38.938426 °
пеш				-121.83022	0°	-121.829365 °
DWR ID	DWR_RD1	500_01_s _ 201	2_979			
		Comn	nent Coc	le		

DT : Ditch

Inspector Comment

Concrete lined ditch is located at the levee toe on the landward side of the levee.

# Photo 1 of 1: SP\_2019\_RD1500\_189\_979\_20190304\_00084.jpg



View of the ditch on the landward side of the levee looking upstream. Spring 2016.

LM Start	24.31	Rating **	М	Issue No.		2584
LM End	24.31	Issue Type +	En	Location *		
Cotogony	Suppleme	ental		GPS La	titud	le/Longitude
Category				Start		End
Item	DWR UC	P Field Study		38.9384	31 °	38.938431 °
пеш				-121.8293	50°	-121.829350 °
DWR ID	24757					
		Comn	nent Cod	le		

#### Inspector Comment

FS ID:28603 DS\_ID:24757 EP\_NO: 10057

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Plant was working during field visit.Leaky pipe near

FIELD\_STRUCT\_DESC: 24-inch steel irrigation discharge pipe through the levee, 6.5 feet below the crown. Corrugated metal cutoff wall. 1.5inch conduit through the levee, 4 feet below the crown. Wooden walkway to a slant pump in a corrugated metal pump house on the berm. Gate valve on the berm. Hersey-Sparling meter on pipe at the waterside (WS) toe. Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the landside (LS) shoulder. Pipe discharges into a 4-foot by 7-foot, inside dimensions, concrete distribution box at the LS toe. Meter pole at the LS toe. Field visit on 01/14/2014. (24-inch steel irrigation discharge pipe through the levee, slant pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10057, 1974 - David S. Lewis, care of Broomieside Farms). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 128, March 1960, (HLM 24.60)].

FS Date: 1/14/2014

#### Photo 1 of 3: UCIP SP 2019 28603 52667.jpg



WS view: slant pump on steel platform at levee berm. Walkway, exposed pipe, and gate valve on the berm.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	24.31	Rating **	М	Issue No.	2	2584 (cont)
LM End	24.31	Issue Type +	En	Location *		
Category	Suppleme	lemental		GPS La	titud	le/Longitude
Calegory						End
Item	DWR UCI	P Field Study		38.9384	31 °	38.938431 °
пеш				-121.8293	50°	-121.829350 °
DWR ID	24757					

### Inspector Comment

Comment Code

#### FS\_ID:28603

DS\_ID:24757 EP\_NO: 10057

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Plant was working during field visit.Leaky pipe near

pump.

FIELD\_STRUCT\_DESC: 24-inch steel irrigation discharge pipe through the levee, 6.5 feet below the crown. Corrugated metal cutoff wall. 1.5-inch conduit through the levee, 4 feet below the crown. Wooden walkway to a slant pump in a corrugated metal pump house on the berm. Gate valve on the berm. Hersey-Sparling meter on pipe at the waterside (WS) toe. Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the landside (LS) shoulder. Pipe discharges into a 4-foot by 7-foot, inside dimensions, concrete distribution box at the LS toe. Meter pole at the LS toe. Field visit on 01/14/2014. (24-inch steel irrigation discharge pipe through the levee, slant pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10057, 1974 - David S. Lewis, care of Broomieside Farms). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 128, March 1960, (HLM 24.60)].

 LM Start
 24.31
 Rating \*\*
 M
 Issue No.
 2584 (cont)

 LM End
 24.31
 Issue Type +
 En
 Location \*

#### Photo 2 of 3: UCIP\_SP\_2019\_28603\_52666.jpg



WS view: leaky pipe near pump platform. Pipe leaks from the joint.

#### Photo 3 of 3: UCIP\_SP\_2019\_28603\_52665.jpg



LS view: siphon breaker in CMP riser on levee slope (bottom) and concrete distribution box (top) on levee toe.

#### **Levee Inspection Report By Mile - Spring 2019**

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

24.37	Rating **	М	Issue No.		148		
25.46	Issue Type +	Ма	Location *		LS		
Earthen L	evee		GPS La	atitud	e/Longitude		
			Start		End		
Vegetatio	n		38.9392	62 °	38.952528 °		
			-121.8295	46 °	-121.837348 °		
R ID DWR_RD1500_01_s _ 2019_148							
	Comm	nent Cod	le				
l annual g	rass and wee	ds on th	e levee slop	oes a	and		
	Inspecto	or Comm	ent				
,	25.46 Earthen L Vegetation DWR_RD1:	25.46 Issue Type + Earthen Levee  Vegetation  DWR_RD1500_01_s_201  Commod annual grass and wee	25.46 Issue Type + Ma  Earthen Levee  Vegetation  DWR_RD1500_01_s _ 2019_148  Comment Cool annual grass and weeds on the	25.46 Issue Type + Ma Location *  Earthen Levee GPS La  Start  Vegetation 38.9392 -121.8295  DWR_RD1500_01_s _ 2019_148  Comment Code  If annual grass and weeds on the levee slop	25.46 Issue Type + Ma Location *  Earthen Levee GPS Latitud  Start  Vegetation 38.939262 ° -121.829546 °  DWR_RD1500_01_s _ 2019_148  Comment Code  If annual grass and weeds on the levee slopes and services are considered as a service of annual grass and weeds on the levee slopes and services are considered as a service of annual grass and weeds on the levee slopes and services are considered as a service of annual grass and weeds on the levee slopes and services are considered as a service of annual grass and weeds on the levee slopes and services are considered as a service of a se		

No Photos

LM Start	24.57	Rating **	М	Issue No. 102			
LM End	24.57	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS La	titud	e/Longitude	
Calegory	alegory				Start		
Item	Animal Control			38.9413	61 °	38.941361	0
пеш			-121.8318	99 °	-121.831899	0	
DWR ID DWR_RD1500_01_f _ 2018_102							
Comment Code							

No Photos

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

There are rodent holes at the landside toe.

Rating A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N: Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	25.49	Rating **	М	Issue No.		2585
LM End	25.49	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.95280	)3 °	38.952803 °
пеш				-121.83761	8 °	-121.837618 °
DWR ID	20074					

#### Comment Code

#### Inspector Comment

FS\_ID:41728 DS\_ID:20074 EP\_NO: 8765

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Burried Concrete headwall on landside toe. Should verify pipe has been properly abandoned. Utility tag plate on waterside shoulder. No pipe found.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 48-inch by 48-inch reinforced concrete box irrigation discharge culvert through the levee, 10 feet below the crown. (48-inch by 48-inch concrete culvert retained under Permit No. 9175, 1973 - David S. Lewis, DBA Broomieside Farms. To sleeve a 20-inch steel irrigation discharge pipe through the existing concrete culvert from a new slant-type pumping facility authorized under Permit No. 8765, 1973 - David S. Lewis, DBA Broomieside Farms. The 20-inch discharge pipe will be enclosed in a 30-inch, 0.375-inch wall steel pipe.). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 25.80)].

LM Start	25.49	Rating **	М	Issue No.	2585 (cont)
LM End	25.49	Issue Type +	En	Location *	



WS view: utility tag plate on waterside shoulder. No pipe found.

#### Photo 2 of 2: UCIP\_SP\_2019\_41728\_52672.jpg



LS view: concrete headwall on landside toe. No pipe found.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	25.50	Rating **	М	Issue No.		95	
LM End	25.50	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee				GPS Latitude/Longitude		
Calegory		Start					
Item	Animal Co	ontrol		38.9529	67°	38.952967 °	
пеш		-121.837730 ° -121.837730					
DWR ID DWR_RD1500_01_f _ 2018_95							

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

There are rodent holes on the landside slope.



View of rodent holes on the landside slope. Fall 2018.

-121.832534 ° -121.820082 °	LM Start	26.03	Rating **	М	Issue No.		146
Category         Start         End           Item         Vegetation         38.958808         38.977796           -121.832534         -121.820082	LM End	27.86	Issue Type +	Ma	Location *		LS
Start         End           Vegetation         38.958808 ° 38.977796 °           -121.832534 ° -121.820082 °					GPS La	atitud	le/Longitude
-121.832534 ° -121.820082 °	Calegory				Start		End
-121.832534 ° -121.820082 °	ltom	Vegetatio	n	38.9588	° 80	38.977796°	
DWR ID DWR RD1500 01 s 2019 146	пеш			-121.820082 °			
DWIT 10 1000_01_3 _ 2010_140	DWR ID	DWR_RD1	500_01_s _ 201	9_146			

Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

LM Start	26.03	Rating **	М	Issue No.		137	
LM End	28.13	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.9588	08°	38.981775	0
пеш				-121.8325	33 °	-121.820026	0
DWR ID DWR_RD1500_01_s _ 2019_137							
Comment Code							

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	26.52	Rating **	М	Issue No.		2586
LM End	26.52	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.9649	15 °	38.964915 °
пеш				-121.8336	75 °	-121.833675 °
DWR ID	20014					

#### Comment Code

#### Inspector Comment

FS\_ID:28629 DS\_ID:20014 EP\_NO: 10057

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: May need proper abandonment.

FIELD\_STRUCT\_DEŚC: \*ABANDONED\* 1 of 2: 24-inch steel irrigation discharge pipe through the levee, 7.1 feet below the crown. Two corrugated metal cutoff walls. Siphon breakers in 24-inch and 30-inch corrugated metal pipe (CMP) risers on the landside (LS) shoulder. 2-inch conduit through the levee. Installed by USACE in 1958. Wooden walkway to two slant pumps on a steel pile structure on berm. Meter pole and switch panel at the LS toe. (Steel discharge pipes, slant pumps, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10057, 1974 - David S. Lewis, care of Broomieside Farms, [RM 112.06]. Moved to HLM 26.50 under Permit No. 16165, 1994 - Pelger Mutual Water Company/Murray, Burns, and Kienlen). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 26.84)].

LM Start	26.52	Rating **	М	Issue No.	2586 (cont)
LM End	26.52	Issue Type +	En	Location *	

#### Photo 1 of 2: UCIP\_SP\_2019\_28629\_52709.jpg



WS view: abandoned 24" and 30" steel pipe on river bank.

#### Photo 2 of 2: UCIP\_SP\_2019\_28629\_52708.jpg



LS view: abandoned CMP risers on levee toe.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	26.52	Rating **	М	Issue No.		2587		
LM End	26.52	Issue Type +	En	Location *				
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	38.96493	1°	38.964931 °				
пеш			-121.83368	2°	-121.833682 °			
DWR ID	20013							

#### Comment Code

#### Inspector Comment

FS\_ID:28628 DS\_ID:20013 EP\_NO: 10057

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: May need proper abandonment.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 2 of 2: 30-inch steel irrigation discharge pipe through the levee, 7.1 feet below the crown. Two corrugated metal cutoff walls. Siphon breakers in 24-inch and 30-inch corrugated metal pipe (CMP) risers on the landside (LS) shoulder. 2-inch conduit through the levee. Installed by USACE in 1958. Wooden walkway to two slant pumps on a steel pile structure on berm. Meter pole and switch panel at the LS toe. (Steel discharge pipes, slant pumps, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10057, 1974 - David S. Lewis, care of Broomieside Farms, [RM 112.06]. Moved to HLM 26.50 under Permit No. 16165, 1994 - Pelger Mutual Water Company/Murray, Burns, and Kienlen). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 26.84)].

LM Start	26.52	Rating **	М	Issue No.	2587 (cont)
LM End	26.52	Issue Type +	En	Location *	

#### Photo 1 of 2: UCIP\_SP\_2019\_28628\_52705.jpg



WS view: abandoned 24" and 30" steel pipe on river bank.

#### Photo 2 of 2: UCIP\_SP\_2019\_28628\_52704.jpg



LS view: abandoned CMP risers on levee toe.

#### **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	26.74	Rating **	М	Issue No.		2588
LM End	26.74	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory	egory					End
Item	DWR UCIP Field Study			38.9680	93 °	38.968093 °
пеш				-121.8337	08 °	-121.833708 °
DWR ID 20015						

#### Comment Code

#### Inspector Comment

FS\_ID:28631 DS\_ID:20015 EP NO: 10052

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Obstructed siphon breaker. Leaky pump.

FIELD STRUCT DESC: 18-inch steel irrigation discharge pipe through the levee, 7.1 feet below the crown. Corrugated metal cutoff wall. 2-inch conduit through the levee, 5.5 feet below the crown. Wooden walkway to slant pump and gate valve on wooden pump platform mounted on a steel pile structure on the berm. Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the landside (LS) slope. Meter pole at the LS toe. (18-inch steel irrigation discharge pipe through the levee, slant pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10052, 1974 - Clifton Lamb, [RM 112.29]). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 27.07)].

FS Date: 1/15/2014

LM Start	26.74	Rating **	М	Issue No.	2588 (cont)
LM End	26.74	Issue Type +	En	Location *	

# Photo 1 of 3: UCIP\_SP\_2019\_28631\_52720.jpg

WS view: slant pump and gate valves on wooden platform at levee berm. Wooden walkway to the pump.

#### Photo 2 of 3: UCIP\_SP\_2019\_28631\_52719.jpg



LS view: siphon breaker in CMP riser on levee slope (bottom) and concrete distribution box on levee toe.

#### Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	26.74	Rating **	М	Issue No.	:	2588 (cont)
LM End	26.74	Issue Type +	En	Location *		
Category	Suppleme		GPS Latitude/Longitude			
Calegory			Start		End	
Item	DWR UCIP Field Study			38.96809	3°	38.968093°
пеш			-121.83370	8 °	-121.833708°	
DWR ID	20015					

Comment Code

#### Inspector Comment

FS\_ID:28631 DS\_ID:20015 EP\_NO: 10052

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Obstructed siphon breaker. Leaky pump.

FIELD\_STRUCT\_DESC: 18-inch steel irrigation discharge pipe through the levee, 7.1 feet below the crown. Corrugated metal cutoff wall. 2-inch conduit through the levee, 5.5 feet below the crown. Wooden walkway to slant pump and gate valve on wooden pump platform mounted on a steel pile structure on the berm. Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the landside (LS) slope. Meter pole at the LS toe. (18-inch steel irrigation discharge pipe through the levee, slant pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10052, 1974 - Clifton Lamb, [RM 112.29]). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 27.07)].



LS view: obstructed siphon breaker in CMP riser on levee slope.

LM Start	27.31	Rating **	М	Issue No.	983	
LM End	27.44	Issue Type +	En	Location *		LS
Category Earthen Levee			GPS Latitude/Longitude			
Calegory	Category					End
Item	Encroachments			38.9725	52°	38.972924°
пеш				-121.8255	74 °	-121.823198°
DWR ID DWR_RD1500_01_s _ 2015_983						
Comment Code						

DT : Ditch

Inspector Comment

#### Photo 1 of 1: SP\_2019\_RD1500\_189\_983\_20190304\_00085.jpg



View of the ditch on the landward side of the levee looking downstream. Spring 2016.

## **Levee Inspection Report By Mile - Spring 2019**

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	27.61	Rating **	М	Issue No.		94		
LM End	27.61	Issue Type +	En	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Encroach	ments		38.9742	258°	38.974258 °		
пеш				-121.820587 °		-121.820587 °		
DWR ID	DWR_RD1	500_01_f _ 201	8_94					
		Comn	nent Cod	le				
ST : Stairv	vay							
	Inspector Comment							
Stairs are dug into the landside slope.								



View of stairs on the landside slope. Fall 2018.

LM Start	28.16	Rating **	М	Issue No.	e No. 96		
LM End	28.16	Issue Type +	En	Location *		LS	
Category	evee	GPS La	atitud	e/Longitude			
Calegory				Start		End	
Item	Encroach	ments		38.9821	80°	38.982180 °	
item				-121.8199	79°	-121.819979 °	
DWR ID DWR_RD1500_01_s _ 2018_96							
		Comn	nent Coc	de			

#### Comment Coc

ST : Stairway

#### Inspector Comment

Steps are dug out on the landside levee slope.



View of steps on the landside slope. Spring 2018.

LM Start	28.23	Rating **	М	Issue No.		38		
LM End	29.23	Issue Type +	En	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Encroach	ments		38.9831	19°	38.988538 °		
пеш				-121.819923 °		-121.806445 °		
DWR ID	DWR_RD1	500_01_s _ 201	2_38					
		Comn	nent Cod	le				
DT : Ditch								
	Inspector Comment							



View of the ditch on the landward side of the levee looking upstream. Spring 2016.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	28.23	Rating **	М	Issue No.	92			
LM End	28.23	Issue Type +	Ма	Location *	LS			
Category	Earthen L	evee	GPS Latitude/Longitude					
Calegory				Start		End		
Item	Animal Co	ontrol		38.98322	21 °	38.983221 °		
пеш				-121.81989	95 °	-121.819895 °		
DWR ID DWR_RD1500_01_f _ 2018_92								
	Comment Code							

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

Rodent holes are located at the landside toe.



View of rodent holes on the landside slope. Fall 2018.

LM Start	28.30	Rating **	М	Issue No.		135
LM End	28.30	Issue Type +	Ma	Location *	LS	
Category	Earthen L	evee	GPS Latitude/Longitude			
Calegory				Start		End
Item	Animal Co	ontrol		38.9841	58°	38.984158 °
пеш				-121.81986	88°	-121.819868 °
DWR ID	DWR_RD1	500_01_s _ 201	9_135			

Comment Code

A1 : Exterminate rodents and backfill and compact or grout burrows.

#### Inspector Comment

Active rodent holes are at the landside toe.

No Photos

LM Start	28.66	Rating **	M	Issue No.		127			
LM End	29.49	Issue Type +	Ма	Location *	WS				
Category	GPS La	atitud	e/Longitude						
Calegory				Start		End			
Item	Vegetatio	n		38.9881	52°	38.988960	0		
пеш				-121.8169	08 °	-121.801734	0		
DWR ID	DWR_RD1	500_01_s _ 201	9_127						
0 10 1									

Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	29.18	Rating **	М	Issue No.	129				
LM End	29.48	Issue Type +	Ма	Location *	LS				
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Category				Start		End			
Item	Vegetatio	n		38.9885	58°	38.988876 °			
пеш				-121.8074	57°	-121.801946 °			
DWR ID	DWR_RD1	500_01_s _ 201	9_129						
		Comn	nent Cod	le					
	V1 : Control annual grass and weeds on the levee slopes and easements.								
	Inspector Comment								

No Photos

LM Start	29.51	Rating **	М	Issue No.		122
LM End	29.51	Issue Type +	Ma	Location *		LS
Category	Earthen L	en Levee GPS Latitude/Longitude				e/Longitude
Calegory				Start		End
Item	Animal Co	ontrol		38.9890	96°	38.989096 °
пеш				-121.8013	87 °	-121.801387°
DWR ID	DWR RD1	500 01 s 201	9 122			

No Photos

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Rodent holes are on the landside shoulder.

LM Start	29.90	Rating **	М	Issue No.	101		
LM End	32.93	Issue Type +	Ma	Location *	WS		
Category	Earthen L	evee	GPS Latitude/Longitude				
Calegory				Start End			
Item	Vegetatio	n		38.99292	22 °	39.020117°	
пеш			-121.796105 ° -121.82034				
DWR ID DWR_RD1500_01_s _ 2019_101							
Comment Code							

No Photos

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	29.91	Rating **	М	Issue No.		2589
LM End	29.91	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Latitude/Lo		e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.99300	o o	38.993006°
пеш				-121.79602	5°	-121.796025 °
DWR ID	20113					

## Inspector Comment

Comment Code

FS\_ID:50194 DS\_ID:20113 EP\_NO: 10054

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 8/29/2016

UCIP Comments: 08/29/2016: Found no evidence of leakage or subsidence. CMP risers are both silted in and need lids. Need a name change permit for new owner Brad Howalt. Possible sink hole in alignment with pipes on crown has been covered with concrete. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)01/15/2014:Levee slope erosion due to leakage from siphon breaker.Water leaking from pipe near distribution box on landside levee toe.Overhead powerline. (P. Amatya - DWR)

FIELD\_STRUCT\_DESC: 2 of 2: 16-inch steel irrigation discharge pipe through the levee, 5 feet below the crown. Corrugated metal cutoff wall. Two siphon breakers in two 24-inch corrugated metal pipe (CMP) risers on the landside (LS) shoulder. Installed by USACE in 1952. Two slant pumps in a corrugated metal pump house mounted on a steel pile structure on the berm. 4-foot by 7-foot concrete inspection box for a Hersey-Sparling water meter on the berm in front of the pump house. Two flap gates in a 9.7-foot by 10.6-foot, outside dimensions, concrete distribution box at the LS toe. (16-inch steel irrigation discharge pipe through the levee, slant pumps, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10054, 1974 - William A. Larner). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 30.29), 14-inch pipe referenced].

Photo 1 of 3 : UCIP\_SP\_2019\_50194\_51834.jpg



WS view: two slant pumps on wooden platform on levee berm.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	29.91	Rating **	М	Issue No.	2589 (cont)		
LM End	29.91	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start End			
Item	DWR UC	IP Field Study		38.9930	06°	38.993006°	
пеш			-121.7960	25 °	-121.796025 °		
DWR ID	DWR ID 20113						
Comment Code							

#### Inspector Comment

FS\_ID:50194 DS\_ID:20113 EP\_NO: 10054

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 8/29/2016

UCIP Comments: 08/29/2016: Found no evidence of leakage or subsidence. CMP risers are both silted in and need lids. Need a name change permit for new owner Brad Howalt. Possible sink hole in alignment with pipes on crown has been covered with concrete. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel-UCIP)01/15/2014:Levee slope erosion due to leakage from siphon breaker.Water leaking from pipe near distribution box on landside levee toe.Overhead powerline. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: 2 of 2: 16-inch steel irrigation discharge pipe through the levee, 5 feet below the crown. Corrugated metal cutoff wall.

through the levee, 5 feet below the crown. Corrugated metal cutoff wall. Two siphon breakers in two 24-inch corrugated metal pipe (CMP) risers on the landside (LS) shoulder. Installed by USACE in 1952. Two slant pumps in a corrugated metal pump house mounted on a steel pile structure on the berm. 4-foot by 7-foot concrete inspection box for a Hersey-Sparling water meter on the berm in front of the pump house. Two flap gates in a 9.7-foot by 10.6-foot, outside dimensions, concrete distribution box at the LS toe. (16-inch steel irrigation discharge pipe through the levee, slant pumps, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10054, 1974 - William A. Larner). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 30.29), 14-inch pipe referenced].

Photo 2 of 3: UCIP\_SP\_2019\_50194\_51833.jpg



LS view: CMPs with leaky siphon breakers. Slope erosion and excessive vegetation on levee slope.

## Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	29.91	Rating **	М	Issue No.	2	2589 (cont)
LM End	29.91	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		38.99300	o o	38.993006 °
пеш				-121.79602	5°	-121.796025 °
DWR ID	20113					

# Inspector Comment

Comment Code

FS\_ID:50194 DS\_ID:20113 EP\_NO: 10054

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 8/29/2016

UCIP Comments: 08/29/2016: Found no evidence of leakage or subsidence. CMP risers are both silted in and need lids. Need a name change permit for new owner Brad Howalt. Possible sink hole in alignment with pipes on crown has been covered with concrete. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)01/15/2014:Levee slope erosion due to leakage from siphon breaker.Water leaking from pipe near distribution box on landside levee toe.Overhead powerline. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: 2 of 2: 16-inch steel irrigation discharge pipe

FIELD\_STRUCT\_DESC: 2 of 2: 16-inch steel irrigation discharge pipe through the levee, 5 feet below the crown. Corrugated metal cutoff wall. Two siphon breakers in two 24-inch corrugated metal pipe (CMP) risers on the landside (LS) shoulder. Installed by USACE in 1952. Two slant pumps in a corrugated metal pump house mounted on a steel pile structure on the berm. 4-foot by 7-foot concrete inspection box for a Hersey-Sparling water meter on the berm in front of the pump house. Two flap gates in a 9.7-foot by 10.6-foot, outside dimensions, concrete distribution box at the LS toe. (16-inch steel irrigation discharge pipe through the levee, slant pumps, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10054, 1974 - William A. Larner). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 30.29), 14-inch pipe referenced].

#### Photo 3 of 3: UCIP\_SP\_2019\_50194\_52880.jpg



LS view: siphon breakers in CMP riser on levee slope and distribution box on levee toe.

## Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	29.91	Rating **	М	Issue No.		2590
LM End	29.91	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		38.9930	06 °	38.993006 °
пеш				-121.7960	25 °	-121.796025 °
DWR ID	20084					

# Inspector Comment

Comment Code

FS ID:50201 DS\_ID:20084 EP NO: 10054

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 8/29/2016

UCIP Comments: 08/29/2016: Found no evidence of leakage or subsidence. CMP risers are both silted in and need lids. Need a name change permit for new owner Brad Howalt. Possible sink hole in alignment with pipes on crown has been covered with concrete. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel -UCIP)01/15/2014:Levee slope erosion due to leakage from siphon breaker. Water leaking from pipe near distribution box on landside levee toe. Overhead powerline. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: 1 of 2: 20-inch steel irrigation discharge pipe

through the levee, 5 feet below the crown. Corrugated metal cutoff wall. Two siphon breakers in two 24-inch corrugated metal pipe (CMP) risers on the landside (LS) shoulder. Installed by USACE in 1952. Two slant pumps in a corrugated metal pump house mounted on a steel pile structure on the berm. 4-foot by 7-foot concrete inspection box for a Hersey-Sparling water meter on the berm in front of the pump house. Two flap gates in a 9.7-foot by 10.6-foot, outside dimensions, concrete distribution box at the LS toe. (20-inch steel irrigation discharge pipe through the levee, slant pumps, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10054, 1974 - William A. Larner). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 30.29), 18-inch pipe referenced].

Photo 1 of 3: UCIP\_SP\_2019\_50201\_52855.jpg



WS view: slant pumps and control boxes on steel platform at levee berm.

## Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	29.91	Rating **	М	Issue No.	2	2590 (cont)
LM End	29.91	Issue Type +	En	Location *		
Category	Suppleme	emental GF				e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.99300	6°	38.993006 °
пеш				-121.79602	5°	-121.796025 °
DWR ID	20084					

## Comment Code

#### Inspector Comment

FS\_ID:50201 DS\_ID:20084 EP\_NO: 10054

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016: Found no evidence of leakage or subsidence. CMP risers are both silted in and need lids. Need a name change permit for new owner Brad Howalt. Possible sink hole in alignment with pipes on crown has been covered with concrete. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)01/15/2014:Levee slope erosion due to leakage from siphon breaker.Water leaking from pipe near distribution box on landside levee toe.Overhead powerline. (P. Amatya - DWR)
FIELD\_STRUCT\_DESC: 1 of 2: 20-inch steel irrigation discharge pipe through the levee, 5 feet below the crown. Corrugated metal cutoff wall. Two siphon breakers in two 24-inch corrugated metal pipe (CMP) risers

through the levee, 5 feet below the crown. Corrugated metal cutoff wall. Two siphon breakers in two 24-inch corrugated metal pipe (CMP) risers on the landside (LS) shoulder. Installed by USACE in 1952. Two slant pumps in a corrugated metal pump house mounted on a steel pile structure on the berm. 4-foot by 7-foot concrete inspection box for a Hersey-Sparling water meter on the berm in front of the pump house. Two flap gates in a 9.7-foot by 10.6-foot, outside dimensions, concrete distribution box at the LS toe. (20-inch steel irrigation discharge pipe through the levee, slant pumps, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10054, 1974 - William A. Larner). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 30.29), 18-inch pipe referenced].

FS Date: 8/29/2016

## Photo 2 of 3: UCIP\_SP\_2019\_50201\_52854.jpg



LS view: siphon breakers in CMP riser on levee slope and distribution box on levee toe.

## Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	29.91	Rating **	М	Issue No.	2	2590 (cont)
LM End	29.91	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory						End
Item	DWR UC	IP Field Study		38.9930	06°	38.993006 °
пеш				-121.79602	25 °	-121.796025 °
DWR ID	20084					

# Comment Code

#### Inspector Comment

FS\_ID:50201 DS\_ID:20084 EP\_NO: 10054

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016: Found no evidence of leakage or subsidence. CMP risers are both silted in and need lids. Need a name change permit for new owner Brad Howalt. Possible sink hole in alignment with pipes on crown has been covered with concrete. Crossing has been downgraded from Urgent to Non-Urgent. (K. Fazel-UCIP)01/15/2014:Levee slope erosion due to leakage from siphon breaker.Water leaking from pipe near distribution box on landside levee toe.Overhead powerline. (P. Amatya - DWR) FIELD\_STRUCT\_DESC: 1 of 2: 20-inch steel irrigation discharge pipe through the levee, 5 feet below the crown. Corrugated metal cutoff wall.

through the levee, 5 feet below the crown. Corrugated metal cutoff wall. Two siphon breakers in two 24-inch corrugated metal pipe (CMP) risers on the landside (LS) shoulder. Installed by USACE in 1952. Two slant pumps in a corrugated metal pump house mounted on a steel pile structure on the berm. 4-foot by 7-foot concrete inspection box for a Hersey-Sparling water meter on the berm in front of the pump house. Two flap gates in a 9.7-foot by 10.6-foot, outside dimensions, concrete distribution box at the LS toe. (20-inch steel irrigation discharge pipe through the levee, slant pumps, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10054, 1974 - William A. Larner). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 30.29), 18-inch pipe referenced].

FS Date: 8/29/2016



LS view: obstructed and leaky siphon breaker in CMP riser on levee slope.

## Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	29.93	Rating **	М	Issue No.		104		
LM End	30.65	Issue Type +	Ma	Location *		LS		
Category	evee	GPS La	atitud	le/Longitude				
Calegory				Start		End		
Item	Vegetatio	n		38.9932	65°	39.000570 °		
пеш				-121.7957	'33 °	-121.801275 °		
DWR ID	DWR_RD1	500_01_s _ 201	9_104					
		Comn	nent Cod	le				
V1 : Contro easements		grass and wee	eds on th	e levee slo	pes	and		
	Inspector Comment							

No Photos

LM Start	30.07	Rating **	М	Issue No.		2591	
LM End	30.07	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Lat	tud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.99498	3°	38.994988	0
iteiii				-121.79448	4°	-121.794484	0
DWR ID	20107						

#### Comment Code

#### Inspector Comment

FS\_ID:50193 DS ID:20107 EP\_NO: 6169

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016: Pipe and pump are leaking oil. Could not find evidence of any water leak. Field hand may have spilled oil as there is a puddle of oil beneath the pump. Crossing downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)01/15/2014: Leaky pump and excessive vegetation observed along pipe alignment on waterside slope of the levee. It needs more investigations. May have new permit for slant pump. (P. Amatya - DWR)

FIELD\_STRUCT\_DESC: 30-inch reinforced concrete encased steel irrigation discharge pipe through the levee, 15.5 feet below the crown. Two reinforced concrete cutoff walls. Slant pump and switch panel on steel pile structure at the edge of the berm. Slide gate in a 2.5-foot by 3.5-foot, inside dimensions, concrete riser on the berm. Pipe discharges into a 6-foot by 8-foot concrete distribution box at the landside (LS) toe. 2-inch conduit through the levee, 2.5 feet below the crown.

(Replacement of an old pit pump with a new slant pump authorized under Permit No. 6169, 1968 - Leslie A. Butler). Pipe through the levee was initially installed in 1952. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960 (HLM 30.46)].

FS Date: 8/29/2016





WS view: leaky slant pump on levee berm.

## **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	30.07	Rating **	M Issue No.		:	2591 (cont)
LM End	30.07	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	le/Longitude	
Calegory				Start		End
Item	DWR UC	P Field Study		38.99498	88°	38.994988 °
пеш				-121.79448	34 °	-121.794484 °
DWR ID	20107					

#### Inspector Comment

Comment Code

FS ID:50193 DS\_ID:20107 EP NO: 6169

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/29/2016: Pipe and pump are leaking oil. Could not find evidence of any water leak. Field hand may have spilled oil as there is a puddle of oil beneath the pump. Crossing downgraded from Urgent to Non-Urgent. (K. Fazel - UCIP)01/15/2014: Leaky pump and excessive vegetation observed along pipe alignment on waterside slope of the levee. It needs more investigations. May have new permit for slant pump. (P. Amatya - DWR)

FIELD\_STRUCT\_DESC: 30-inch reinforced concrete encased steel irrigation discharge pipe through the levee, 15.5 feet below the crown. Two reinforced concrete cutoff walls. Slant pump and switch panel on steel pile structure at the edge of the berm. Slide gate in a 2.5-foot by 3.5-foot, inside dimensions, concrete riser on the berm. Pipe discharges into a 6-foot by 8-foot concrete distribution box at the landside (LS) toe. 2-inch conduit through the levee, 2.5 feet below the crown. (Replacement of an old pit pump with a new slant pump authorized under Permit No. 6169, 1968 - Leslie A. Butler). Pipe through the levee was initially installed in 1952. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960 (HLM 30.46)].

FS Date: 8/29/2016

LM Start	30.07	Rating **	М	Issue No.	2591 (cont)
LM End	30.07	Issue Type +	En	Location *	

# Photo 2 of 3: UCIP\_SP\_2019\_50193\_51826.jpg



WS view: concrete surge box with slide gate on levee berm.

#### Photo 3 of 3: UCIP\_SP\_2019\_50193\_51825.jpg



WS view: excessive vegetation along pipe alignment on levee slope.

## Levee Inspection Report By Mile - Spring 2019

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	30.22	Rating **	М	Issue No.		45	
LM End	30.22	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory				Start		End	
Item	Vegetatio	n		38.9970	)27°	38.997027°	
пеш				-121.794755 °		-121.794755 °	
DWR ID	DWR_RD1	500_01_s _ 201	2_45				
		Comn	nent Cod	le			
V6 : Lands	caping						
Inspector Comment							



View of the groundcover on the landward side of the levee looking downstream. Spring 2016.

LM Start	30.60	Rating **	A/W	Issue No.		82	
LM End	30.75	Issue Type +	Ma	Location *	WS		
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item		ACE Erosion S	Survey,	38.99974	45 °	39.001413 °	
пеш	DRAFT			-121.80089	98 °	-121.802889 °	
DWR ID DWR_RD1500_01_f _ 2018_82							
Comment Code							

#### Inspector Comment

2017 Site ID: SAC 116.0 L

Status: Eroding

2017 Field Notes: Minor new erosion throughout the site.
Site History: 2000 - Eroding, vertical berm slope over a vertical cohesive toe; slow erosion but getting close to the toe. 2002 - Erosion is getting close to the levee, still eroding with some new small slumps.
2004 - Some minor new erosion. 2006 - Some new erosion, cleaned off older scars and slump faces. 2008 - New, small, partial rotational failure. 2011 - Some new minor erosion. 2016 - Fresh erosion on lower bank.

#### Photo 1 of 1: SP\_2019\_RD1500\_189\_82\_20190304\_00033.jpg



USACE 2013 Photo #1

## Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	30.79	Rating **	М	Issue No.		97
LM End	32.93	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Vegetatio	Vegetation			98°	39.020117°
пеш				-121.8028	77 °	-121.820341 °
DWR ID	DWR_RD1	500_01_s _ 201	9_97			
		Comn	nent Cod	le		
V1 : Contro easements		grass and wee	ds on th	e levee slo	pes a	and
Inspector Comment						

No Photos

LM Start	30.87	Rating **	М	Issue No.		2592	
LM End	30.87	Issue Type +	En	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.00296	0°	39.002960	0
item				-121.80373	6°	-121.803736	0
DWR ID	20000						

#### Comment Code

#### Inspector Comment

FS\_ID:28144 DS ID:20000 EP\_NO: 15916

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Surface erosion due to leaky pressure breaker on

landside slope.

FIELD STRUCT DESC: 18-inch steel irrigation discharge pipe through the levee, at an unknown depth. Waterside (WS) pump not mentioned in the Levee Log. Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the landside (LS) slope. Pipe discharges into a 6-foot by 8-foot, inside dimensions, concrete distribution box at the LS toe. Installed by USACE in 1951. (12-inch steel irrigation discharge pipe through the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10034, 1974 - Leslie A. Butler. Replacement of the existing 12-inch discharge pipe with a new 18-inch discharge pipe through the levee authorized under Permit No. 15916, 1992 - Leslie A. Butler). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 31.26)]. FS Date: 1/15/2014

Photo 1 of 3: UCIP\_SP\_2019\_28144\_51812.jpg



WS view: pump in CM pump house on levee shoulder. Looks abandoned.

## **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	30.87	Rating **	М	Issue No.	2	2592 (cont)
LM End	30.87	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		39.00296	60°	39.002960°
пеш				-121.80373	36°	-121.803736 °
DWR ID	20000					

#### Comment Code

#### Inspector Comment

FS\_ID:28144 DS\_ID:20000 EP NO: 15916

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Surface erosion due to leaky pressure breaker on

landside slope

FIELD\_STRUCT\_DESC: 18-inch steel irrigation discharge pipe through the levee, at an unknown depth. Waterside (WS) pump not mentioned in the Levee Log. Siphon breaker in a 24-inch corrugated metal pipe (CMP) riser on the landside (LS) slope. Pipe discharges into a 6-foot by 8-foot, inside dimensions, concrete distribution box at the LS toe. Installed by USACE in 1951. (12-inch steel irrigation discharge pipe through the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10034, 1974 - Leslie A. Butler. Replacement of the existing 12-inch discharge pipe with a new 18-inch discharge pipe through the levee authorized under Permit No. 15916, 1992 - Leslie A. Butler). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 31.26)].

FS Date: 1/15/2014

LM Start	30.87	Rating **	М	Issue No.	2592 (cont)
LM End	30.87	Issue Type +	En	Location *	



LS view: obstructed and leaked pressure breaker in CMP on levee slope.

Photo 3 of 3: UCIP\_SP\_2019\_28144\_51815.jpg



LS view: corroded flap gate in concrete distribution box.

## Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	30.94	Rating **	A/W	Issue No.		83		
LM End	31.60	Issue Type +	Ma	Location *		WS		
Category	ental	GPS Latitude/Longitude						
Calegory				Start End				
Item		ACE Erosion S	Survey,	39.00330	)1 °	39.006072 °		
пеш	DRAFT			-121.80502	24 °	-121.815926 °		
DWR ID DWR_RD1500_01_f _ 2018_83								
	Comment Code							

#### Inspector Comment

2017 Site ID: SAC 116.5 L

Status: Eroding

2017 Field Notes: pipe and pump encroachment. site has been stable

for a few years.

Site History: 2003 - New sedimentation and some new small toe scallops at the upstream end; downstream end has some new erosion. 2004 - Some new erosion at the toe and upper bank and some small new rotational failures (mainly minor, except at the downstream end). 2007 - Some new slumps. 2009 - Some new scallops and site was extended upstream. 2010 - New deposition along upstream end of site, however there is also new erosion throughout the site. Site seems to be worsening, and eroding fast. Large habitat for bank swallows. 2011 - Some new minor erosion. 2012 - Minor new erosion. 2016 - Fresh erosion on lower bank.



USACE 2013 Photo #1

LM Start	31.54	Rating **	A/W	Issue No.	o. <b>86</b>		
LM End	31.54	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End	
Item	Encroach	ments		39.0066	87°	39.006687 °	
пеш				-121.8149	67°	-121.814967 °	
DWR ID	DWR RD1	500 01 s 201	6 86				

#### Comment Code

MW : Monitoring Well

#### Inspector Comment

UCIP installed this monitoring station for seepage in the area. Monitor for vandalism or damage PN: (18630).

#### Photo 1 of 2: SP\_2019\_RD1500\_189\_86\_20190304\_00038.jpg



View of the pizometer on the landward side of the levee. Spring 2016.

## **Levee Inspection Report By Mile - Spring 2019**

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

		D :: ++					
LM Start	31.54	Rating **	A/W	Issue No.	86 (cont)		
LM End	31.54	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		39.006687°		39.006687°	
пеш				-121.814967 °		-121.814967 °	
DWR ID	DWR_RD1	500_01_s _ 201	6_86				
		Comn	nent Cod	de			
MW : Mon	itoring We	II					
Inspector Comment							
UCIP installed this monitoring station for seepage in the area. Monitor for vandalism or damage PN: (18630).							

Photo 2 of 2 : SP\_2019\_RD1500\_189\_86\_20190304\_00039.jpg



The control unit for pizometers installed in 2012, photo taken spring 2012.

## Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	31.61	Rating **	М	Issue No.		2593		
LM End	31.61	Issue Type +	En	Location *		Location *		
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	IP Field Study		39.00648	4 °	39.006484°		
пеш				-121.81616	3°	-121.816168°		
DWR ID	20077							

#### Comment Code

#### Inspector Comment

FS\_ID:28143 DS\_ID:20077 EP\_NO: 9657

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Looks abandoned. May need proper

abondonement. Overhead power line.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 20-inch steel irrigation discharge pipe through the levee, 15 feet below the crown. Wooden step and walkway to vertical pump on pile structure in the river. Slide gate in a 2.5-foot by 3-foot, inside dimensions, riser. Concrete distribution box on the waterside (WS) slope. Switch panel on the berm. Pipe discharges into a 36-inch, inside diameter, concrete standpipe on the landside (LS). Installed by USACE in 1947. (Replacement of a section of 24-inch irrigation pipe through the levee authorized under Permit No. 9657, 1974 - Clyde M. Bell. 1.5-foot by 2-foot concrete culvert through the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10030, 1974 -Clyde M. Bell. Replacement of a cracked concrete pipe with a steel pipe at the LS toe authorized under Permit No. 13536, 1982 - Niechen N. V., Alfred Montna, Manager. Replacement of approximately 90 feet of 18inch pipe in the overflow area of the Sacramento River with new steel pipe authorized under Permit No. 13941, 1984 - Niechen N. V., Alfred Montna, Manager). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 32.02), 2foot by 2-foot concrete culvert referenced]. FS Date: 1/15/2014

LM Start	31.61	Rating **	М	Issue No.	2593 (cont)
LM End	31.61	Issue Type +	En	Location *	

#### Photo 1 of 3: UCIP\_SP\_2019\_28143\_51805.jpg



WS view: concrete surge box on levee slope.

#### Photo 2 of 3: UCIP\_SP\_2019\_28143\_51804.jpg



WS view: abandoned walkway, pipe, and pump on river bank.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	31.61	Rating **	М	Issue No.	2	2593 (cont)
LM End	31.61	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		39.00648	4 °	39.006484°
пеш				-121.81616	3°	-121.816168 °
DWR ID	20077					

## Comment Code

#### Inspector Comment

FS\_ID:28143 DS\_ID:20077 EP\_NO: 9657

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 1/15/2014

UCIP Comments: Looks abandoned. May need proper

abondonement. Overhead power line.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 20-inch steel irrigation discharge pipe through the levee, 15 feet below the crown. Wooden step and walkway to vertical pump on pile structure in the river. Slide gate in a 2.5-foot by 3-foot, inside dimensions, riser. Concrete distribution box on the waterside (WS) slope. Switch panel on the berm. Pipe discharges into a 36-inch, inside diameter, concrete standpipe on the landside (LS). Installed by USACE in 1947. (Replacement of a section of 24-inch irrigation pipe through the levee authorized under Permit No. 9657, 1974 - Clyde M. Bell. 1.5-foot by 2-foot concrete culvert through the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10030, 1974 -Clyde M. Bell. Replacement of a cracked concrete pipe with a steel pipe at the LS toe authorized under Permit No. 13536, 1982 - Niechen N. V., Alfred Montna, Manager. Replacement of approximately 90 feet of 18inch pipe in the overflow area of the Sacramento River with new steel pipe authorized under Permit No. 13941, 1984 - Niechen N. V., Alfred Montna, Manager). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 32.02), 2foot by 2-foot concrete culvert referenced].

Photo 3 of 3: UCIP\_SP\_2019\_28143\_51803.jpg



LS view: concrete standpipe on levee toe.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	32.42	Rating **	М	Issue No.	60		
LM End	32.57	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory		Start		End			
Encroachments ltem				39.013749°		39.015620	٥
пеш	em			-121.825065 °		-121.823461	٥
DWR ID	DWR_RD1	500_01_s _ 201	2_60				
		Comn	nent Cod	le			
DT : Ditch							
Inspector Comment							

Ditch is located at the toe of the levee.



View of the ditch on the landward side of the levee looking upstream. Spring 2016.

Photo 1 of 3: UCIP SP 2019 28943 53222.jpg

LM Start	32.55	Rating **	М	Issue No.	2594		
LM End	32.55	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	atitud	le/Longitude	
Calegory		Start		End			
Item	DWR UC	39.0152	77°	39.015277	0		
пеш				-121.8237	35 °	-121.823735	0
DWR ID 20018							
Comment Code							

#### Inspector Comment

FS\_ID:28943 DS\_ID:20018 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe leaks near pump through a hole in the pipe. Needs repair.An electric conduit through the levee. Concrete distribution box on landside levee toe. Slide gate in CMP on waterside slope.

FIELD\_STRUCT\_DESC: 30-inch reinforced concrete encased steel irrigation discharge pipe through the levee, 16 feet below the crown. 2-inch steel conduit through the levee. Two reinforced concrete cutoff walls. Vertical pump on a structure in the river. Slide gate in a 48-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Power pole and switch panel on the WS slope. Pipe discharges into a 5-foot by 5-foot concrete distribution box in an irrigation ditch at the landside (LS) toe. Power pole at the LS toe. Installed by USACE in 1964. (30-inch reinforced concrete encased steel irrigation discharge pipe through the levee, vertical pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10079, 1974 - Russell L. Young). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 32.97)]. FS Date: 1/15/2014

WS view: power control panel and CMP riser with slide gate on levee slope.

## Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	32.55	Rating **	М	Issue No.	2	2594 (cont)	
LM End	32.55	Issue Type +	En	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UC	IP Field Study		39.01527	7°	39.015277°	
пеш				-121.82373	85 °	-121.823735°	
DWR ID	20018						

# Comment Code

Inspector Comment FS ID:28943

DS\_ID:20018 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe leaks near pump through a hole in the pipe. Needs repair. An electric conduit through the levee. Concrete distribution box on landside levee toe. Slide gate in CMP on waterside

slope.

FIELD\_STRUCT\_DESC: 30-inch reinforced concrete encased steel irrigation discharge pipe through the levee, 16 feet below the crown. 2inch steel conduit through the levee. Two reinforced concrete cutoff walls. Vertical pump on a structure in the river. Slide gate in a 48-inch corrugated metal pipe (CMP) riser on the waterside (WS) slope. Power pole and switch panel on the WS slope. Pipe discharges into a 5-foot by 5-foot concrete distribution box in an irrigation ditch at the landside (LS) toe. Power pole at the LS toe. Installed by USACE in 1964. (30-inch reinforced concrete encased steel irrigation discharge pipe through the levee, vertical pump, and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10079, 1974 -Russell L. Young). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 128, March 1960, (HLM 32.97)]. FS Date: 1/15/2014

LM Start	32.55	Rating **	М	Issue No.	2594 (cont)
LM End	32 55	Issue Type +	Fn	Location *	

# Photo 2 of 3: UCIP\_SP\_2019\_28943\_53221.jpg



WS view: pump on river bank protected by concrete headwall. Leaky pipe near pump.

#### Photo 3 of 3: UCIP\_SP\_2019\_28943\_53220.jpg



LS view: steel pipe in concrete distribution box on levee toe.

## **Levee Inspection Report By Mile - Spring 2019**

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	32.84	Rating **	M	Issue No.		110	
LM End	32.84	Issue Type +	En	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroachments			39.0188	52°	39.018852 °	
пеш				-121.820766 °		-121.820766 °	
DWR ID	DWR_RD1	500_01_f _ 201	7_110				
		Comn	nent Cod	le			
DE : Debri	S						
Inspector Comment							
There is an abandoned pipe on the waterside slope.							

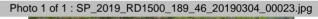
No Photos

LM Start	32.96	Rating **	М	Issue No.	46				
LM End	32.96	Issue Type +	En	Location *	LS				
	Earthen L		GPS La	atitud	le/Longitude				
Category			Start		End				
Item	Encroachments			39.0205	50°	39.020550 °			
item			-121.8203	15 °	-121.820315 °				
DWR ID DWR_RD1500_01_s _ 2012_46									
	Commont Code								

#### Comment Code

BU : Building

#### Inspector Comment





The building is within the easement of the levee toe.

LM Start	32.98	Rating **	М	Issue No.	144			
LM End	32.98	Issue Type +	Ma	Location *	LS			
Category	Earthen L	GPS La	titud	e/Longitude				
Calegory			Start		End			
Item	Erosion / Bank Caving			39.020782 °		39.020782 °		
пеш			-121.8202	75 °	-121.820275 °			
DWR ID	/R ID DWR_RD1500_01_s _ 2017_144							
	Comment Code							

#### Comment Code

E2 : Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

There is runoff erosion on the landside slope.



View of erosion on landside slope. Spring 2017.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## **Levee Inspection Report By Mile - Spring 2019**

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	32.98	Rating **	М	Issue No.		107			
LM End	32.98	Issue Type +	Ma	Location *	LS				
Category Earthen Levee			GPS Latitude/Longitude						
Calegory			Start		End				
Item	Animal Co	Animal Control			74°	39.020874°			
item			-121.820266 °		-121.820266 °				
DWR ID	DWR_RD1	500_01_f _ 201	6_107						
Comment Code									
A3 : No rodents visible, but rodent burrows visible; need to backfill and									

Inspector Comment



View of rodent burrows on landside slope. Fall 2016.

LM Start	32.99	Rating **	A/W	Issue No.	106	
LM End	32.99	Issue Type +	Ma	Location *	LS	
Category	Earthen L	GPS Latitude/Longitude				
Calegory				Start		End
Item	Erosion / Bank Caving			39.02101	6 °	39.021016 °
item				-121.82026	1 °	-121.820261 °
DWR ID	DWR_RD1	500_01_f _ 201	6_106			

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

No Photos

LM Start	33.05	Rating **	С	Issue No.		91			
LM End	33.05	Issue Type +	Ma	Location *		LS			
Catagony	Earthen L	GPS Latitude/Longitude							
Category				Start		End			
Item	Erosion / Bank Caving			39.0218	65 °	39.021865	0		
пеш				-121.8203	56°	-121.820356	0		
DWR ID	DWR ID DWR_RD1500_01_f _ 2018_91								
	Comment Code								

E1: Note and monitor erosion site.

Inspector Comment

Minor runoff erosion on the landside slope. Recommend monitoring.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## **Levee Inspection Report By Mile - Spring 2019**

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	33.13 Rating ** M		Issue No.		2595	
LM End	33.13	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	atitud	e/Longitude
Calegory			Start		End	
Item	DWR UCI	P Field Study		39.0229	38°	39.022938°
пеш			-121.8207	17°	-121.820717°	
DWR ID	20080					

## Comment Code

#### Inspector Comment

FS\_ID:28953 DS\_ID:20080 EP\_NO: 5617

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Not found- slide gate in 54 inch corrugated metal riser on waterside berm.Two 16-inch steel pipes (looks new). Leaky pipe near pump.Plant was working during field visit.Needs more info from LMA. There may be a new permit.

FIELD\_STRUCT\_DESC: 1 of 2: 16-inch steel irrigation discharge pipe through the levee, at an unknown depth. Two slant pumps on a steel platform and under the shed. Two air vents on the waterside (WS) levee shoulder. Two pipes with gate valves discharge water into irrigation ditch on the landside (LS). Meter pole on landside toe. Previously only a 30-inch steel pipe through the levee and a slide gate in a corrugated metal pipe (CMP) riser on the WS. (Removal of existing structure in river, installation of an incline structure next to the levee with new slant pumps, connected to existing discharge pipe authorized under Permit Nos. 5617, 1967 - Adda Seamans, and 5617-A, 1968 - Oji Brothers Farm, Inc.). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 33.56), 36-inch pipe referenced].

FS Date: 1/15/2014

LM Start	33.13	Rating **	М	Issue No.	2595 (cont)
LM End	33.13	Issue Type +	En	Location *	

## Photo 1 of 3: UCIP\_SP\_2019\_28953\_53256.jpg



WS view: slant pumps on steel platform in shed on berm.



WS view: closer view of slant pumps on steel platform in shed on berm.

Location Rating Issue Type Ma : Maintenance Deficiency LS: Land Side N/A: Not Applicable N: Not Inspected/Rated : Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	33.13	Rating **	М	Issue No.	2	2595 (cont)	
LM End	33.13	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS Lat	itud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.02293	8°	39.022938	•
пеш				-121.82071	7°	-121.820717	•
DWR ID	20080						

## Comment Code

#### Inspector Comment

FS ID:28953 DS\_ID:20080 EP NO: 5617

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 1/15/2014

UCIP Comments: Not found- slide gate in 54 inch corrugated metal riser on waterside berm. Two 16-inch steel pipes (looks new), Leaky pipe near pump. Plant was working during field visit. Needs more info from LMA. There may be a new permit.

FIELD\_STRUCT\_DESC: 1 of 2: 16-inch steel irrigation discharge pipe through the levee, at an unknown depth. Two slant pumps on a steel platform and under the shed. Two air vents on the waterside (WS) levee shoulder. Two pipes with gate valves discharge water into irrigation ditch on the landside (LS). Meter pole on landside toe. Previously only a 30-inch steel pipe through the levee and a slide gate in a corrugated metal pipe (CMP) riser on the WS. (Removal of existing structure in river, installation of an incline structure next to the levee with new slant pumps, connected to existing discharge pipe authorized under Permit Nos. 5617, 1967 - Adda Seamans, and 5617-A, 1968 - Oji Brothers Farm, Inc.). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 33.56), 36-inch pipe referenced].

Photo 3 of 3: UCIP\_SP\_2019\_28953\_53254.jpg



WS view: oil and water leaking from pipe near pump.

WS: Water Side CR: Crown

A: Acceptable Minimally Acceptable U: Unacceptable

N: Not Inspected/Rated C: Corrected

Issue Type Ma : Maintenance Deficiency

Ob: Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	33.13	Rating **	М	Issue No.		2596
LM End	33.13	Issue Type +	En	Location *		
Category				GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UC	IP Field Study		39.02295	66°	39.022956°
пеш				-121.82071	6°	-121.820716 °
DWR ID	24758					

#### Comment Code

#### Inspector Comment

FS\_ID:28952 DS\_ID:24758 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 1/15/2014

UCIP Comments: Not found- slide gate in 54 inch corrugated metal riser on waterside berm.Two 16-inch steel pipes (looks new). Leaky pipe near pump.Plant was working during field visit.Needs more info from LMA. There may be a new permit.

FIELD\_STRUCT\_DESC: 2 of 2: 16-inch steel irrigation discharge pipe through the levee, at an unknown depth. Two slant pumps on a steel platform and under the shed. Two air vents on the waterside (WS) levee shoulder. Two pipes with gate valves discharge water into irrigation ditch on the landside (LS). Meter pole on landside toe. Previously only a 30-inch steel pipe through the levee and a slide gate in a corrugated metal pipe (CMP) riser on the WS. (Removal of existing structure in river, installation of an incline structure next to the levee with new slant pumps, connected to existing discharge pipe authorized under Permit Nos. 5617, 1967 - Adda Seamans, and 5617-A, 1968 - Oji Brothers Farm, Inc.). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 33.56), 36-inch pipe referenced].

LM Start	33.13	Rating **	М	Issue No.	2596 (cont)
LM End	33.13	Issue Type +	En	Location *	

# Photo 1 of 3 : UCIP\_SP\_2019\_28952\_53249.jpg



WS view: pump platform and shed on levee berm.



WS view: two slant pumps on steel platform at waterside berm.

## Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	33.15	04/24/2019 04/26/2019	Zach Jojola

LM Start	33.13	Rating **	М	Issue No.	2	2596 (cont)
LM End	33.13	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		39.02295	6°	39.022956
пеш				-121.82071	3°	-121.820716 °
DWR ID	24758					

# Comment Code

#### Inspector Comment

FS\_ID:28952 DS\_ID:24758 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Not found- slide gate in 54 inch corrugated metal riser on waterside berm.Two 16-inch steel pipes (looks new). Leaky pipe near pump.Plant was working during field visit.Needs more info from LMA. There may be a new permit.

FIELD\_STRUCT\_DESC: 2 of 2: 16-inch steel irrigation discharge pipe through the levee, at an unknown depth. Two slant pumps on a steel platform and under the shed. Two air vents on the waterside (WS) levee shoulder. Two pipes with gate valves discharge water into irrigation ditch on the landside (LS). Meter pole on landside toe. Previously only a 30-inch steel pipe through the levee and a slide gate in a corrugated metal pipe (CMP) riser on the WS. (Removal of existing structure in river, installation of an incline structure next to the levee with new slant pumps, connected to existing discharge pipe authorized under Permit Nos. 5617, 1967 - Adda Seamans, and 5617-A, 1968 - Oji Brothers Farm, Inc.). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 128, March 1960, (HLM 33.56), 36-inch pipe referenced].



WS view: oil and water leakage from pipe near pump.

#### **Unit Cover Sheet**

**Spring 2019 Levee Inspection Results** 

### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles
Unit No. 02 Sutter Bypass	Right	20.72

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/24/2019 - 4/24/2019			
DWR Inspector	Zach Jojola			
Accompanied By				

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

## **Levee Inspection Report By Mile - Spring 2019**

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	0.00	Rating **	М	Issue No.		20	
LM End	20.72	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.7611	17°	39.021354°	
пеш				-121.6746	-121.674649 ° -121.741159		
DWR ID	DWR_RD1	500_02_s _ 201	9_20				
		Comn	nent Cod	le			
V1 : Contro easements		grass and wee	eds on th	e levee slo	pes a	and	
	Inspector Comment						

No Photos

LM Start	0.00	Rating **	М	Issue No.		21			
LM End	20.72	Issue Type +	Ma	Location *	WS				
Category	Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End			
Item	Vegetatio	n		38.7611	17°	39.021356	٥		
пеш				-121.6746	49°	-121.741157	٥		
DWR ID	DWR_RD1	500_02_s _ 201	9_21						
		_		-					

Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

LM Start	0.00	Rating **	М	Issue No.		12	
LM End	0.00	Issue Type +	En	Location *	WS		
Catagony	.evee	GPS Latitude/Longitude					
Category				Start		End	
Item	Encroachments			38.7611	21 °	38.761121 °	
пеш				-121.674592 °		-121.674592 °	
DWR ID	DWR_RD1	500_02_s _ 201	2_12				
Comment Code							
EQ : Equipment							

Inspector Comment

Photo 1 of 1 : SP\_2019\_RD1500\_190\_12\_20190304\_00005.jpg



View of the equipment on the levee crown looking upstream. Spring 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

## Levee Inspection Report By Mile - Spring 2019

## **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	0.07	Rating **	С	Issue No.		38
LM End	0.07	Issue Type +	En Location *			LS
Category Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End
Item	Encroach	ncroachments			64°	38.761754°
пеш			-121.67378	80°	-121.673780°	
DWR ID	DWR_RD1	500_02_f _ 201	7_38			

TR: Tree or limb

Inspector Comment

Comment Code

Fallen tree at landside toe.

No Photos

LM Start	0.13	Rating **	M	Issue No.		39
LM End	0.13	Issue Type +	Ма	Location *		LS
Category	evee	GPS Latitude/Longitude				
Calegory				Start		End
Item	Animal Co	ontrol		38.7624	29°	38.762429 °
пеш			-121.6729	24 °	-121.672924°	
DWR ID	DWR RD1	500 02 f 201	7 39			

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

There is a rodent hole near the landside toe.

#### Photo 1 of 1: SP\_2019\_RD1500\_190\_39\_20190304\_00011.jpg



View of rodent hole on landside slope. Fall 2017.

LM Start	0.14	Rating **	М	Issue No.		16	
LM End	0.14	Issue Type +	Ma	Location *	LS		
Category	Earthen L	GPS Latitude/Longitude					
Calegory			Start		End		
Item	Animal Co	ontrol		38.76256	64°	38.762564	0
Item				-121.67277	71 °	-121.672771	0
DWR ID	DWR_RD1	500_02_f _ 201	8_16				

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment

There are multiple holes on the landside slope.

#### Photo 1 of 1 : SP\_2019\_RD1500\_190\_16\_20190304\_00009.jpg



View of rodent holes on the landside slope. Fall 2018.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.92	Rating **	A/W	Issue No.	40		
LM End	1.92	Issue Type +	Ma	Location *			
Catagony	Category Supplemental				GPS Latitude/Longitude		
Calegory						End	
Item	DWR UC	IP LMA Respo	onsibility	38.78386	5°	38.783865 °	
пеш				-121.65517	0 °	-121.655170 °	
DWR ID	20020						

#### Comment Code

#### Inspector Comment

FS\_ID:28886 DS\_ID:20020 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: Pumping plat was working during the field visit. Hydraulic gates on outfall structure. Motorized slide gates on waterside shoulder.

Plant No. 3] 1 of 4: 72-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee, 35 feet below the crown. Two concrete cutoff walls. Pumps in concrete pumping plant on the landside (LS). Timber steps on the LS slope. Two service poles and anchors on the LS shoulder. Electrical control gates in a metal and concrete building on the waterside (WS) shoulder. Flap gates on the WS end. Installed by USACE in 1950. (Construction of a four compartment concrete gravity outlet conduit under the levee authorized under Permit No. 1284, 1948 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, June 1954, (Station 1227+00)].

FS Date: 1/21/2014

LM Start	1.92	Rating **	A/W	Issue No.	40 (cont)
LM End	1.92	Issue Type +	Ma	Location *	



WS view: CM shed for slide gate on levee shoulder (top) and outfall structure at levee toe (bottom).



WS view: motorized slide gates in CM shed on levee shoulder.

Location Rating Issue Type LS: Land Side Ma: Maintenance Deficiency N/A: Not Applicable N: Not Inspected/Rated : Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected En: Enforcement CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.92	Rating **	A/W	Issue No.		40 (cont)		
LM End	1.92	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory			Start			End		
Item	DWR UC	IP LMA Respo	nsibility	38.78386	5°	38.783865°		
пеш				-121.65517	o°	-121.655170°		
DWR ID	20020							

## Comment Code

#### Inspector Comment

FS\_ID:28886 DS\_ID:20020 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: Pumping plat was working during the field visit. Hydraulic gates on outfall structure. Motorized slide gates on waterside shoulder.

FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 3] 1 of 4: 72-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee, 35 feet below the crown. Two concrete cutoff walls. Pumps in concrete pumping plant on the landside (LS). Timber steps on the LS slope. Two service poles and anchors on the LS shoulder. Electrical control gates in a metal and concrete building on the waterside (WS) shoulder. Flap gates on the WS end. Installed by USACE in 1950. (Construction of a four compartment concrete gravity outlet conduit under the levee authorized under Permit No. 1284, 1948 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, June 1954, (Station 1227+00)].



LS view: pump house at the end of levee berm.

## Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.92	Rating **	A/W	Issue No.		41
LM End	1.92	Issue Type +	Ma	Location *		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude
Calegory	Category					End
Item	DWR UC	P LMA Respo	onsibility	38.78388	5 °	38.783885 °
пеш				-121.65515	3°	-121.655158 °
DWR ID	20027					

## Comment Code

#### Inspector Comment

FS\_ID:28883 DS\_ID:20027 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: Pumping plat was working during the field visit. Hydraulic gates on outfall structure. Motorized slide gates on waterside shoulder.

FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 3] 2 of 4: 72-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee, 35 feet below the crown. Two concrete cutoff walls. Pumps in concrete pumping plant on the landside (LS). Timber steps on the LS slope. Two service poles and anchors on the LS shoulder. Electrical control gates in a metal and concrete building on the waterside (WS) shoulder. Flap gates on the WS end. Installed by USACE in 1950. (Construction of a four compartment concrete gravity outlet conduit under the levee authorized under Permit No. 1284, 1948 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, June 1954, (Station 1227+00)].

LM Start	1.92	Rating **	A/W	Issue No.	41 (cont)
LM End	1.92	Issue Type +	Ma	Location *	



WS view: CM shed for slide gate on levee shoulder (top) and outfall structure at levee toe (bottom).





WS view: motorized slide gates in CM shed on levee shoulder.

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.92	Rating **	A/W	Issue No.		41 (cont)	
LM End	1.92	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UC	IP LMA Respo	nsibility	38.78388	5 °	38.783885 °	
item	""			-121.65515	8°	-121.655158°	
DWR ID	20027						

#### Comment Code

#### Inspector Comment

FS\_ID:28883 DS\_ID:20027 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: Pumping plat was working during the field visit. Hydraulic gates on outfall structure. Motorized slide gates on waterside shoulder.

FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 3] 2 of 4: 72-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee, 35 feet below the crown. Two concrete cutoff walls. Pumps in concrete pumping plant on the landside (LS). Timber steps on the LS slope. Two service poles and anchors on the LS shoulder. Electrical control gates in a metal and concrete building on the waterside (WS) shoulder. Flap gates on the WS end. Installed by USACE in 1950. (Construction of a four compartment concrete gravity outlet conduit under the levee authorized under Permit No. 1284, 1948 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, June 1954, (Station 1227+00)].



LS view: pump house at the end of levee berm.

## Levee Inspection Report By Mile - Spring 2019

#### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.92	Rating **	A/W	Issue No.		42	
LM End	1.92	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory						End	
Item	DWR UCIP LMA Responsibility			38.7839	04°	38.783904°	
пеш				-121.6551	49 °	-121.655149°	
DWR ID	20028						

## Comment Code

#### Inspector Comment

FS\_ID:28884 DS\_ID:20028 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

1.92

LM End

UCIP Comments: Pumping plat was working during the field visit. Hydraulic gates on outfall structure. Motorized slide gates on waterside shoulder.

Plant No. 3] 3 of 4: 72-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee, 35 feet below the crown. Two concrete cutoff walls. Pumps in concrete pumping plant on the landside (LS). Timber steps on the LS slope. Two service poles and anchors on the LS shoulder. Electrical control gates in a metal and concrete building on the waterside (WS) shoulder. Flap gates on the WS end. Installed by USACE in 1950. (Construction of a four compartment concrete gravity outlet conduit under the levee authorized under Permit No. 1284, 1948 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, June 1954, (Station 1227+00)].

LM Start 1.92 Rating \*\* A/W Issue No. 42 (cont)

Ма

Location \*

Issue Type +



WS view: CM shed for slide gate on levee shoulder (top) and outfall structure at levee toe (bottom).



WS view: motorized slide gates in CM shed on levee shoulder.

Location Rating Issue Type LS: Land Side Ma: Maintenance Deficiency N/A: Not Applicable N: Not Inspected/Rated : Acceptable Minimally Acceptable Ob : Design & System Obsolescence WS: Water Side C: Corrected En: Enforcement CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain

## **Levee Inspection Report By Mile - Spring 2019**

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.92	Rating **	A/W	Issue No.	42 (cont)		
LM End	1.92	Issue Type +	Ма	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Calegory			Start		End	
Item	DWR UC	IP LMA Respo	onsibility	38.78390	)4 °	38.783904°	
пеш				-121.65514	9°	-121.655149°	
DWR ID	20028						

## Comment Code

#### Inspector Comment

FS\_ID:28884 DS\_ID:20028 EP NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: Pumping plat was working during the field visit. Hydraulic gates on outfall structure. Motorized slide gates on waterside shoulder.

FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 3] 3 of 4: 72-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee, 35 feet below the crown. Two concrete cutoff walls. Pumps in concrete pumping plant on the landside (LS). Timber steps on the LS slope. Two service poles and anchors on the LS shoulder. Electrical control gates in a metal and concrete building on the waterside (WS) shoulder. Flap gates on the WS end. Installed by USACE in 1950. (Construction of a four compartment concrete gravity outlet conduit under the levee authorized under Permit No. 1284, 1948 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, June 1954, (Station 1227+00)].



LS view: pump house at the end of levee berm.

## Levee Inspection Report By Mile - Spring 2019

## Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.92	Rating **	A/W	Issue No.		43	
LM End	1.92	Issue Type +	Ma	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	DWR UCIP LMA Responsibility			4 °	38.783924°	
пеш				-121.65514	o°	-121.655140 °	
DWR ID	20029						

#### Comment Code

#### Inspector Comment

FS\_ID:28885 DS\_ID:20029 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: Pumping plat was working during the field visit. Hydraulic gates on outfall structure. Motorized slide gates on waterside shoulder.

FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 3] 4 of 4: 72-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee, 35 feet below the crown. Two concrete cutoff walls. Pumps in concrete pumping plant on the landside (LS). Timber steps on the LS slope. Two service poles and anchors on the LS shoulder. Electrical control gates in a metal and concrete building on the waterside (WS) shoulder. Flap gates on the WS end. Installed by USACE in 1950. (Construction of a four compartment concrete gravity outlet conduit under the levee authorized under Permit No. 1284, 1948 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, June 1954, (Station 1227+00)].

FS Date: 1/21/2014

LM Start	1.92	Rating **	A/W	Issue No.	43 (cont)
LM End	1.92	Issue Type +	Ma	Location *	



WS view: CM shed for slide gate on levee shoulder (top) and outfall structure at levee toe (bottom).



WS view: motorized slide gates in CM shed on levee shoulder.

Location Rating Issue Type LS: Land Side Ma: Maintenance Deficiency N/A: Not Applicable N: Not Inspected/Rated : Acceptable Minimally Acceptable Ob: Design & System Obsolescence WS: Water Side C: Corrected En: Enforcement CR: Crown U: Unacceptable A/W: Acceptable but Monitor & Maintain

# **Levee Inspection Report By Mile - Spring 2019**

### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.92	Rating **	A/W	Issue No.	43 (cont)		
LM End	1.92	Issue Type +	Ма	Location *			
Category	Supplemental Supplemental			GPS Lat	itud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	onsibility	38.78392	4 °	38.783924	0
пеш				-121.65514	0°	-121.655140	0
DWR ID	20029						

# Inspector Comment

Comment Code

FS\_ID:28885 DS\_ID:20029 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: Pumping plat was working during the field visit. Hydraulic gates on outfall structure. Motorized slide gates on

waterside shoulder.

FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 3] 4 of 4: 72-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee, 35 feet below the crown. Two concrete cutoff walls. Pumps in concrete pumping plant on the landside (LS). Timber steps on the LS slope. Two service poles and anchors on the LS shoulder. Electrical control gates in a metal and concrete building on the waterside (WS) shoulder. Flap gates on the WS end. Installed by USACE in 1950. (Construction of a four compartment concrete gravity outlet conduit under the levee authorized under Permit No. 1284, 1948 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, June 1954, (Station 1227+00)].

FS Date: 1/21/2014



LS view: pump house at the end of levee berm.

# **Levee Inspection Report By Mile - Spring 2019**

### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.93	Rating **	A/W	Issue No.		44
LM End	1.93	Issue Type +	Ma	Location *		
Category	Supplemental					le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	38.78409	7°	38.784097 °
пеш				-121.65507	3°	-121.655073 °
DWR ID	20019					

#### Comment Code

### Inspector Comment

FS ID:28954 DS\_ID:20019 EP NO: 10088

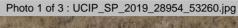
Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: USED Bench Mark on concrete structure at waterside

shoulder.

FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 2] 1 of 3: 48-inch by 48-inch reinforced concrete box drainage discharge conduit under the levee, 37 feet below the crown. Two concrete cutoff walls. Pumps in concrete pumping plant on the landside (LS). Slide gates mounted on a concrete structure on the waterside (WS) slope. Discharges in borrow pit. Flap gates on the WS end. (48inch by 48-inch reinforced concrete box drainage discharge conduit under the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10088, 1974 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, June 1954, (Station 1226+00)]. FS Date: 1/21/2014

LM Start	1.93	Rating **	A/W	Issue No.	44 (cont)
LM End	1.93	Issue Type +	Ma	Location *	





WS view: U type concrete headwall and flap gates on levee toe.

Photo 2 of 3: UCIP\_SP\_2019\_28954\_53259.jpg



WS view: concrete surge structure on waterside shoulder.

# **Levee Inspection Report By Mile - Spring 2019**

### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.93	Rating **	A/W	Issue No.		44 (cont)
LM End	1.93	Issue Type +	Ма	Location *		
Category Supplemental				GPS Latitude/Longitude		
Calegory	Category					End
Item	DWR UC	DWR UCIP LMA Responsibility			97°	38.784097 °
item			-121.65507	73 °	-121.655073 °	
DWR ID	20019					

### Comment Code

### Inspector Comment

FS\_ID:28954 DS\_ID:20019 EP NO: 10088

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: USED Bench Mark on concrete structure at waterside shoulder.

FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 2] 1 of 3: 48-inch by 48-inch reinforced concrete box drainage discharge conduit under the levee, 37 feet below the crown. Two concrete cutoff walls. Pumps in concrete pumping plant on the landside (LS). Slide gates mounted on a concrete structure on the waterside (WS) slope. Discharges in borrow pit. Flap gates on the WS end. (48inch by 48-inch reinforced concrete box drainage discharge conduit under the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10088, 1974 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, June 1954, (Station 1226+00)]. FS Date: 1/21/2014

Photo 3 of 3: UCIP\_SP\_2019\_28954\_53262.jpg



WS view: USED Bench Mark on concrete structure on levee shoulder.

# **Levee Inspection Report By Mile - Spring 2019**

### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.93	Rating **	A/W	Issue No.		45
LM End	1.93	Issue Type +	Ма	Location *		
Category	Supplemental				itud	le/Longitude
Calegory	gory					End
Item	DWR UC	IP LMA Respo	nsibility	38.78411	1 °	38.784111 °
пеш				-121.65506	7 °	-121.655067 °
DWR ID	20025					

# Comment Code

#### Inspector Comment

FS\_ID:28955 DS\_ID:20025 EP NO: 10088

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: USED Bench Mark on concrete structure at levee shoulder.

FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 2] 2 of 3: 48-inch by 48-inch reinforced concrete box drainage discharge conduit under the levee, 37 feet below the crown. Two concrete cutoff walls. Pumps in concrete pumping plant on the landside (LS). Slide gates mounted on a concrete structure on the waterside (WS) slope. Discharges in borrow pit. Flap gates on the WS end. (48inch by 48-inch reinforced concrete box drainage discharge conduit under the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10088, 1974 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, June 1954, (Station 1226+00)]. FS Date: 1/21/2014

LM Start	1.93	Rating **	A/W	Issue No.	45 (cont)
LM End	1.93	Issue Type +	Ma	Location *	

# Photo 1 of 3: UCIP\_SP\_2019\_28955\_53265.jpg



WS view: U type concrete headwall and flap gates on levee toe.

### Photo 2 of 3: UCIP\_SP\_2019\_28955\_53263.jpg



WS view: concrete surge structure on waterside shoulder.

# **Levee Inspection Report By Mile - Spring 2019**

### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.93	Rating **	A/W	Issue No.		45 (cont)	
LM End	1.93	Issue Type +	Ма	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory	egory					End	
Item	DWR UC	OWR UCIP LMA Responsibility			1 °	38.784111 °	
пеш				-121.65506	67 °	-121.655067 °	
DWR ID	20025						

# Comment Code

#### Inspector Comment

FS\_ID:28955 DS\_ID:20025 EP NO: 10088

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: USED Bench Mark on concrete structure at levee

shoulder.

FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 2] 2 of 3: 48-inch by 48-inch reinforced concrete box drainage discharge conduit under the levee, 37 feet below the crown. Two concrete cutoff walls. Pumps in concrete pumping plant on the landside (LS). Slide gates mounted on a concrete structure on the waterside (WS) slope. Discharges in borrow pit. Flap gates on the WS end. (48inch by 48-inch reinforced concrete box drainage discharge conduit under the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10088, 1974 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, June 1954, (Station 1226+00)]. FS Date: 1/21/2014

# Photo 3 of 3: UCIP\_SP\_2019\_28955\_53264.jpg



WS view: USED Bench Mark on concrete structure at levee shoulder.

# **Levee Inspection Report By Mile - Spring 2019**

### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.93	Rating **	A/W	Issue No.		46	
LM End	1.93	Issue Type +	Ма	Location *			
Category	Catagoni Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	38.78412	27°	38.784127 °	
Item				-121.6550	57 °	-121.655057 °	
DWR ID	20026						

#### Comment Code

### Inspector Comment

FS ID:28956 DS\_ID:20026 EP NO: 10088

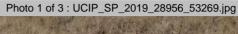
Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: USED Bench Mark on concrete structure at waterside

shoulder.

FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 2] 3 of 3: 48-inch by 48-inch reinforced concrete box drainage discharge conduit under the levee, 37 feet below the crown. Two concrete cutoff walls. Pumps in concrete pumping plant on the landside (LS). Slide gates mounted on a concrete structure on the waterside (WS) slope. Discharges in borrow pit. Flap gates on the WS end. (48inch by 48-inch reinforced concrete box drainage discharge conduit under the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10088, 1974 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, June 1954, (Station 1226+00)]. FS Date: 1/21/2014

LM Start	1.93	Rating **	A/W	Issue No.	46 (cont)
LM End	1.93	Issue Type +	Ma	Location *	





WS view: U type concrete headwall and flap gates on levee toe.

Photo 2 of 3: UCIP\_SP\_2019\_28956\_53268.jpg



WS view: U type concrete headwall and flap gates on levee toe.

# Levee Inspection Report By Mile - Spring 2019

### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.93	Rating **	A/W	Issue No.		46 (cont)	
LM End	1.93	Issue Type +	Ма	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	38.78412	27°	38.784127 °	
пеш				-121.6550	57°	-121.655057 °	
DWR ID	20026						

### Comment Code

### Inspector Comment

FS\_ID:28956 DS\_ID:20026 EP\_NO: 10088

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: USED Bench Mark on concrete structure at waterside

shoulder.

FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 2] 3 of 3: 48-inch by 48-inch reinforced concrete box drainage discharge conduit under the levee, 37 feet below the crown. Two concrete cutoff walls. Pumps in concrete pumping plant on the landside (LS). Slide gates mounted on a concrete structure on the waterside (WS) slope. Discharges in borrow pit. Flap gates on the WS end. (48-inch by 48-inch reinforced concrete box drainage discharge conduit under the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10088, 1974 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 129, June 1954, (Station 1226+00)]. FS Date: 1/21/2014



WS view: USED Bench Mark on concrete structure at levee shoulder.

LM Start	1.95	Rating **	М	Issue No.		22	
LM End	1.95	Issue Type +	Ma	Location *	CR		
Category	Cotogon Earthen Levee			GPS Latitude/Longitud			
Calegory				Start		End	
Item	Crown Surface / Depressions /			38.78429	96°	38.784296°	
Rutting			-121.65499	97°	-121.654997°		
DWR ID DWR_RD1500_02_s _ 2019_22							
Comment Code							

C2: Repair depressions or ruts in the crown or slope.

Inspector Comment



View of rut on the crown. Spring 2019.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.98	Rating **	A/W	Issue No.		47	
LM End	1.98	Issue Type +	Ма	Location *			
Category	Supplemental				GPS Latitude/Longitude		
Calegory	Calegory			Start		End	
Item	DWR UCI	DWR UCIP LMA Responsibility			33 °	38.784783 °	
item			-121.65479	91 °	-121.654791 °		
DWR ID	20088						

# Comment Code

### Inspector Comment

FS\_ID:28891 DS\_ID:20088 EP\_NO: 10088

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: Pumping plant was working during the field visit. Three 8.5 ft. X 8.5 ft. concrete box on waterside shoulder. FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 1] 1 of 3: 84-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee, 24 feet below the crown. Pumps in concrete pumping plant on the landside (LS). Slide gates mounted on a concrete structure on the waterside (WS) slope. Discharges in a concrete spillway and the borrow pit. Ramp on the WS slope. (84-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10088, 1974 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 129, June 1954, (Station 1224+75), three 78-inch concrete conduits referenced].

LM Start	1.98	Rating **	A/W	Issue No.	47 (cont)
LMEnd	1 02	Issue Type +	Ma	Location *	



WS view: slide gate in concrete box on levee shoulder.

#### Photo 2 of 3: UCIP SP 2019 28891 53136.jpg



WS view: inside view of concrete box on levee shoulder.

# Levee Inspection Report By Mile - Spring 2019

### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.98	Rating **	A/W	Issue No.		47 (cont)		
LM End	1.98	Issue Type +	Ма	Location *				
Catagony	Category Supplemental				Supplemental GPS Latitude/Longitu			e/Longitude
Calegory						End		
Item	DWR UC	IP LMA Respo	nsibility	38.78478	3°	38.784783 °		
пеш				-121.65479	1°	-121.654791 °		
DWR ID	20088							

#### Comment Code

### Inspector Comment

FS\_ID:28891 DS\_ID:20088 EP\_NO: 10088

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: Pumping plant was working during the field visit. Three 8.5 ft. X 8.5 ft. concrete box on waterside shoulder. FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 1] 1 of 3: 84-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee, 24 feet below the crown. Pumps in concrete pumping plant on the landside (LS). Slide gates mounted on a concrete structure on the waterside (WS) slope. Discharges in a concrete spillway and the borrow pit. Ramp on the WS slope. (84-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10088, 1974 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 129, June 1954, (Station 1224+75), three 78-inch concrete conduits referenced].

### Photo 3 of 3: UCIP\_SP\_2019\_28891\_53135.jpg



WS view: outfall structure on levee toe and concrete box on levee shoulder.

# Levee Inspection Report By Mile - Spring 2019

### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.98	Rating **	A/W	Issue No.		48
LM End	1.98	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS La	tituc	le/Longitude
Calegory				Start		End
Item	DWR UCIP LMA Responsibility			38.78481	8°	38.784818 °
пеш				-121.65477	'8	-121.654778°
DWR ID	20092					

# Comment Code

### Inspector Comment

FS\_ID:28892 DS\_ID:20092 EP\_NO: 10088

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: Pumping plant was working during the field visit. Three 8.5 ft. X 8.5 ft. concrete box on waterside shoulder. FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 1] 2 of 3: 84-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee, 24 feet below the crown. Pumps in concrete pumping plant on the landside (LS). Slide gates mounted on a concrete structure on the waterside (WS) slope. Discharges in a concrete spillway and the borrow pit. Ramp on the WS slope. (84-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10088, 1974 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 129, June 1954, (Station 1224+75), three 78-inch concrete conduits referenced].

LM Start	1.98	Rating **	A/W	Issue No.	48 (cont)
LM End	1.98	Issue Type +	Ma	Location *	

# Photo 1 of 3 : UCIP\_SP\_2019\_28892\_53147.jpg



WS view: outfall structure on levee toe and concrete box on levee shoulder.

### Photo 2 of 3: UCIP\_SP\_2019\_28892\_53146.jpg



WS view: slide gate in concrete box on levee shoulder.

# Levee Inspection Report By Mile - Spring 2019

### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.98	Rating **	A/W	Issue No.		48 (cont)
LM End	1.98	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	38.78481	в°	38.784818 °
пеш				-121.65477	3°	-121.654778 °
DWR ID	20092					

# Inspector Comment

Comment Code

FS\_ID:28892 DS\_ID:20092 EP\_NO: 10088

FS Date: 1/21/2014

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: Pumping plant was working during the field visit. Three 8.5 ft. X 8.5 ft. concrete box on waterside shoulder. FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 1] 2 of 3: 84-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee, 24 feet below the crown. Pumps in concrete pumping plant on the landside (LS). Slide gates mounted on a concrete structure on the waterside (WS) slope. Discharges in a concrete spillway and the borrow pit. Ramp on the WS slope. (84-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10088, 1974 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 129, June 1954, (Station 1224+75), three 78-inch concrete conduits referenced].

Photo 3 of 3: UCIP\_SP\_2019\_28892\_53145.jpg



WS view: inside view of concrete box on levee shoulder.

# Levee Inspection Report By Mile - Spring 2019

### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.99	Rating **	A/W	Issue No.		49	
LM End	1.99	Issue Type +	Ма	Location *			
Category	Suppleme	ental		GPS Lati	tud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP LMA Respo	nsibility	38.784856	°	38.784856	0
пеш				-121.654762	°	-121.654762	0
DWR ID	20093						

### Inspector Comment

Comment Code

FS\_ID:28893 DS\_ID:20093 EP NO: 10088

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: Pumping plant was working during the field visit. Three 8.5 ft. X 8.5 ft. concrete box on waterside shoulder. FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 1] 3 of 3: 84-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee, 24 feet below the crown. Pumps in concrete pumping plant on the landside (LS). Slide gates mounted on a concrete structure on the waterside (WS) slope. Discharges in a concrete spillway and the borrow pit. Ramp on the WS slope. (84-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10088, 1974 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 129, June 1954, (Station 1224+75), three 78-inch concrete conduits referenced].

LM Start	1.99	Rating **	A/W	Issue No.	49 (cont)
LM End	1.99	Issue Type +	Ma	Location *	



WS view: slide gate in concrete box on levee shoulder.

#### Photo 2 of 3: UCIP SP 2019 28893 53156.jpg



WS view: inside view of concrete box on levee shoulder.

# Levee Inspection Report By Mile - Spring 2019

### Reclamation District No. 1500 Sutter Basin

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	1.99	Rating **	A/W	Issue No.		49 (cont)
LM End	1.99	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	itud	le/Longitude
Calegory				Start		End
Item	DWR UC	IP LMA Respo	nsibility	38.78485	6°	38.784856 °
item				-121.65476	2 °	-121.654762°
DWR ID	20093					

# Comment Code

#### Inspector Comment

FS\_ID:28893 DS\_ID:20093 EP\_NO: 10088

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: Pumping plant was working during the field visit. Three 8.5 ft. X 8.5 ft. concrete box on waterside shoulder. FIELD\_STRUCT\_DESC: [Reclamation District No. 1500, Pumping Plant No. 1] 3 of 3: 84-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee, 24 feet below the crown. Pumps in concrete pumping plant on the landside (LS). Slide gates mounted on a concrete structure on the waterside (WS) slope. Discharges in a concrete spillway and the borrow pit. Ramp on the WS slope. (84-inch by 84-inch reinforced concrete box drainage discharge conduit under the levee and all other appurtenances retained under Automatic Board Order (ABO) issued as Permit No. 10088, 1974 - Reclamation District No. 1500). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 129, June 1954, (Station 1224+75), three 78-inch concrete conduits referenced].

Photo 3 of 3 : UCIP\_SP\_2019\_28893\_53155.jpg

WS view: outfall structure on levee toe and concrete box on levee shoulder.

LM Start	9.07	Rating **	A/W	Issue No.		17	
LM End		Issue Type +	Ob	Location *			
Category	Suppleme	ental		GPS Latin	ude	e/Longitude	
Calegory				Start		End	
Item	2017 Stor	m Damage		38.882215	0		0
item				-121.635989	0		0
DWR ID	DWR_RD1	500_02_f _ 201	7_17				
		0		1_			

### Comment Code

#### Inspector Comment

Levee Evaluation Comments

Description:

Site ID No:171

Site Designation:294-07 Repair Type: Seepage

Rating: Field Date: Notes: No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	9.47	Rating **	A/W	Issue No. 18		18	
LM End		Issue Type +	Ob	Location *			
Category			GPS Latitude/Longitude				
Calegory			Start		End		
Item	2017 Storm Damage			38.88793	3°		0
пеш				-121.63584	o°		0
DWR ID DWR_RD1500_02_f _ 2017_18							
Comment Code							

### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:170

Site Designation:294-08 Repair Type: Seepage

Rating: Field Date: Notes: No Photos

Rating \*\* A/W Issue No. 9.52 19 LM Start Issue Type + Location \* LM End Supplemental GPS Latitude/Longitude Category Start End 2017 Storm Damage 38.888648° -121.635940° DWR ID DWR\_RD1500\_02\_f \_ 2017\_19 Comment Code

No Photos

### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:168

Site Designation:294-114 Repair Type: Seepage

Rating: Field Date: Notes:

# Levee Inspection Report By Mile - Spring 2019

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LNA Ctart	9.54	Rating **	A/W	Issue No.		22	_
LM Start	9.54	Rating	A/VV	issue ivo.		33	
LM End		Issue Type +	Ob	Location *			
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	2017 Storm Damage		38.8889	35 °		0	
пеш				-121.6359	81 °		0
DWR ID							
Comment Code							

### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:169

Site Designation:294-10 Repair Type: Seepage

Rating: Field Date: Notes: No Photos

Rating \*\* A/W Issue No. 9.74 34 LM Start Issue Type + Location \* LM End Supplemental GPS Latitude/Longitude Category Start End 2017 Storm Damage 38.891792° -121.636405 ° DWR ID DWR\_RD1500\_02\_f \_ 2017\_34

Comment Code

#### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:167

Site Designation:294-115 Repair Type: Seepage

Rating: Field Date: Notes: No Photos

# Levee Inspection Report By Mile - Spring 2019

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	10.25	Rating **	A/W	Issue No. 35		35	
LM End		Issue Type +	Ob	Location *			
Category			GPS Latitude/Longitude				
Calegory			Start		End		
Item	2017 Storm Damage			38.89920	9°		0
пеш				-121.63770	°		0
DWR ID DWR_RD1500_02_f _ 2017_35							
Comment Code							

### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:172

Site Designation:294-11 Repair Type: Seepage

Rating: Field Date: Notes: No Photos

Rating \*\* A/W Issue No. 10.31 36 LM Start Issue Type + Location \* LM End Supplemental GPS Latitude/Longitude Category Start End 2017 Storm Damage 38.900064° -121.637846 ° DWR ID DWR\_RD1500\_02\_f \_ 2017\_36 Comment Code

Comment Code

#### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:166

Site Designation:294-12 Repair Type: Seepage

Rating: Field Date: Notes: No Photos

# Levee Inspection Report By Mile - Spring 2019

### **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	10.34	Rating **	A/W	Issue No.		37	
LM End		Issue Type +	Ob	Location *			
Category	Supplemental			GPS Latitude/Longitude			
Calegory						End	
Item	2017 Stor	m Damage		38.900493	°		0
пеш				-121.637921	0		0
DWR ID	DWR_RD1	500_02_s _ 201	9_37				

### Comment Code

### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:165

Site Designation:294-13 Repair Type: Seepage

Rating: Field Date: Notes:

LM Start	14.13	Rating **	U	Issue No.		4
LM End	14.13	Issue Type +	Ma	Location *		LS
Category	Earthen Levee			GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Undersee	page Relief W	/ells	38.9476	28°	38.947628 °
пеш				-121.6697	64 °	-121.669764°
DWR ID	DWR_RD1	500_02_s _ 201	2_4			

### Comment Code

#### Inspector Comment

The concrete pad and the PVC underneath are broken apparently by an attempt to pull out the head of the well.

No Photos

### Photo 1 of 3: SP\_2019\_RD1500\_190\_4\_20190304\_00001.jpg



View of underseepage relief well with destroyed concrete pad as well as PVC pipes. Fall 2016.

# Levee Inspection Report By Mile - Spring 2019

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	14.13	Rating **	U	Issue No.		4 (cont)
LM End	14.13	Issue Type +	Ma	Location *	LS	
Category Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End
Item	Undersee	page Relief W	/ells	38.94762	8°	38.947628°
пеш				-121.66976	4 °	-121.669764°
DWR ID DWR_RD1500_02_s _ 2012_4						
		_				

### Comment Code

### Inspector Comment

The concrete pad and the PVC underneath are broken apparently by an attempt to pull out the head of the well.

LM Start	14.13	Rating **	U	Issue No.	4 (cont)
LM End	14.13	Issue Type +	Ma	Location *	LS

### Photo 2 of 3: SP\_2019\_RD1500\_190\_4\_20190304\_00002.jpg



Another view of damaged well. Fall 2016.

### Photo 3 of 3: SP\_2019\_RD1500\_190\_4\_20190304\_00003.jpg



View of the relief well at historical boil 12. Fall 2015.

LM Start	14.47	Rating **	A/W	Issue No.	11		
LM End	14.47	Issue Type +	Ma	Location *	LS		
Category	evee	GPS Latitude/Longitude					
Calegory	litegory					End	
Item	Underseepage Relief Wells			38.951413 °		38.951413°	
пеш	nem				56 °	-121.673856 °	
DWR ID DWR_RD1500_02_s _ 2012_11							
Comment Code							
Inspector Comment							



A relief well at historical boil 16. Fall 2015.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Spring 2019

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	18.17	Rating **	A/W	Issue No.		13	
LM End	18.17	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Underseepage Relief Wells			38.9870	31 °	38.987031 °	
item			-121.725049 °		-121.725049°		
DWR ID DWR_RD1500_02_s _ 2012_13							
Comment Code							

Inspector Comment

LM Start	18.17	Rating **	A/W	Issue No.	13 (cont)
I M End	18.17	Issue Type +	Ma	Location *	LS



View of two of four drains on the landward side of the levee. Fall 2015.

Photo 2 of 2: SP\_2019\_RD1500\_190\_13\_20190304\_00007.jpg



View of the 4 drains at the levee toe on the landward side. Fall 2015.

LM Start	18.43	Rating **	A/W	Issue No.		15	
LM End	18.43	Issue Type +	Ma	Location *		LS	
Earthen Levee GPS Latitude/Longitu				e/Longitude			
Category				Start End			
Item	Undersee	page Relief W	/ells	38.9899	62°	38.989962 °	
item			-121.727896 °		-121.727896 °		
DWR ID DWR_RD1500_02_s _ 2015_15							
Comment Code							
Inspector Comment							

Photo 1 of 1: SP\_2019\_RD1500\_190\_15\_20190304\_00008.jpg



View of the toe drainage at the landward toe berm. Fall 2015.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

# **Levee Inspection Report By Mile - Spring 2019**

# **Reclamation District No. 1500 Sutter Basin**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	20.72	04/24/2019 04/24/2019	Zach Jojola

LM Start	18.73	Rating **	М	Issue No.		23	
LM End	18.73	Issue Type +	Ма	Location *		WS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	Calegory					End	
Item	Encroach	ncroachments			48°	38.993748 °	
пеш				-121.7308	07 °	-121.730807 °	
DWR ID DWR_RD1500_02_s _ 2019_23							
		Comn	nent Cod	le			
TR : Tree	or limb						
Inspector Comment							
There is a fallen tree on the waterside slope.							

No Photos

LM Start	18.78	Rating **	М	Issue No.		24	
LM End	18.78	Issue Type +	En	Location *	WS		
Cotogon/ Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Encroachments			38.9943	30°	38.994330 °	
item				-121.731177 °		° -121.731177	
DWR ID	500_02_s _ 201	9_24					
		Comn	nent Cod	le			
TR : Tree	TR : Tree or limb						
Inspector Comment							
A fallen tre	A fallen tree on the waterside slope needs removal.						

No Photos

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency

Ob : Design & System Obsolescence

En : Enforcement